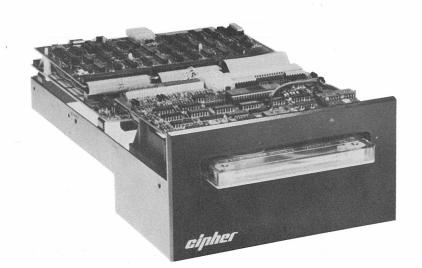


Quarterback 4-Inch Cartridge Tape Drive Engineering Drawing Package

Volume 2





Quarterback[™]
¼-Inch Cartridge Tape Drive
Engineering Drawing Package

Volume 2

RECORD OF REVISIONS

Revision	Description	Date
А	Original Publication	5/82
В	Updated all sections, deleted Section 4. Revised per ACN 2783 and 31583.	12/83
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SECTION I

LOGIC SCHEMATICS

I.I INTRODUCTION

This volume contains all data essential to understand the logic functions of the Quarterback tape drive, as described in Volume I. The information is presented in the following manner:

Section I Logic Schematics

Section 2 Assembly Drawings

Section 3 Master Parts List

I.2 RELATED DOCUMENTS

To enhance user knowledge of the Quarterback tape drive, the following related documents are available:

Product Description	•	•	•	•	•	•	•	•	۰	۰	٠	•	•	•	•	•	.207102-001
Maintenance Manual (Volume I)	•	•	•	۰	•		•	•	۰	•	٠	٠	0	•	۰		.207100-001
Theory of Operation (Volume 3).	۰		۰						۰				۰	٠	٠		.207100-003

1.3 LOGIC DEFINITIONS AND SYMBOLOGY

In several portions of this documentation, primarily Volume 3, and in this Engineering Drawing Package, logic symbols are used to represent certain logical functions or integrated circuit elements. The accepted integrated circuit manufacturer's industry-standard symbols are used here.

Since DTL and TTL logic is being employed, it is of the typical inverting type that use NAND-NOR elements rather than AND-OR devices.

In the logic schematics, the input/output lines to each device are shown for the true (active) state of the function. A state indicator, shown as a small circle at the input or output of a device, signifies that, if that line is in the true state, it is at a 0-Volt potential (low). Lack of a state indicator signifies that, if that line is in the true state, it is at +5 Volts (high). An example of a logic symbol with definitions is shown in Figure 1-1. The symbol depicts a logical NOR element which represents that output D is at +5 Volts if either input, A, B or C is at 0-Volt.

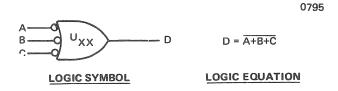


Figure I-I. Logic Symbol Example

This figure shows a logical NOR element that says D is at +5 Volts (true state) if any one, or any combination of A, B, or C is at zero Volt. Typically, the reference designator of the particular chip in the assembly is shown within the symbol, and the corresponding integrated circuit (IC) pin numbers are shown on the lines external to the symbol. The numbers within the arrowheads on the logic schematics indicate the source or destination of the related signal by logic schematic page number. An arrowhead placed adjacent to a signal line indicates a connection at that point.

1.4 INTEGRATED CIRCUIT REFERENCE DATA

The one-shot produces a positive-going pulse at the "I" output and a negative-going pulse at the "O" output, and these are initiated at the time the input pulse makes a transition to its true state. The flip-flops are of the J-K type and have the input/output functions listed in Table I-I. Tables I-2 and I-3 are truth tables applicable to these devices.

Table I-I. Flip-Flop I/O Functions

Designation	Function
J	Synchronous set input
K	Synchronous reset input
Т	Clock input
SD	Direct set input
C _D	Direct clear (or Reset) input
	Set output
0	Reset output

-

Table 1-2. Truth Table for Synchronous Operation

Table 1-3. Truth Table for Asynchronous Operation

	Before	After	Clock				
Out	tputs	Inp	uts	Outputs			
 	0 H L L	J H X X	K X X L H	-	0 H L L H		

	Inputs	Outputs					
SD L L H H	ILILO	l H H L Synchronous Operation	0 H L H				

Table 1-4 shows all the logic symbols used in this manual with their corresponding names and logical equations. The equations shown are defined by the true level of the input signal.

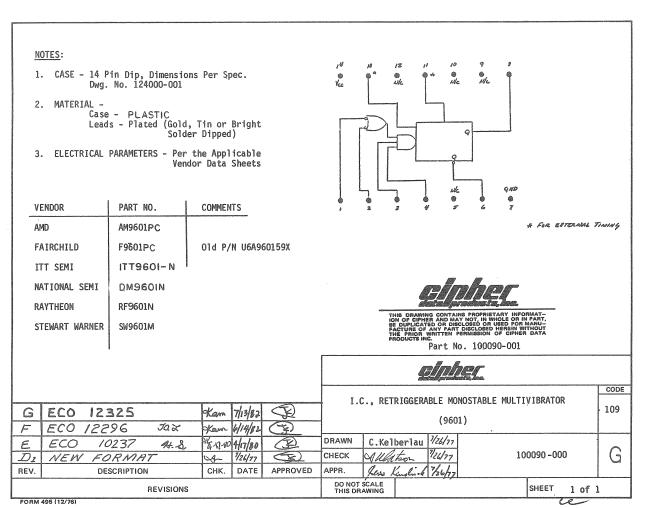
Table 1-4. Logic Symbols

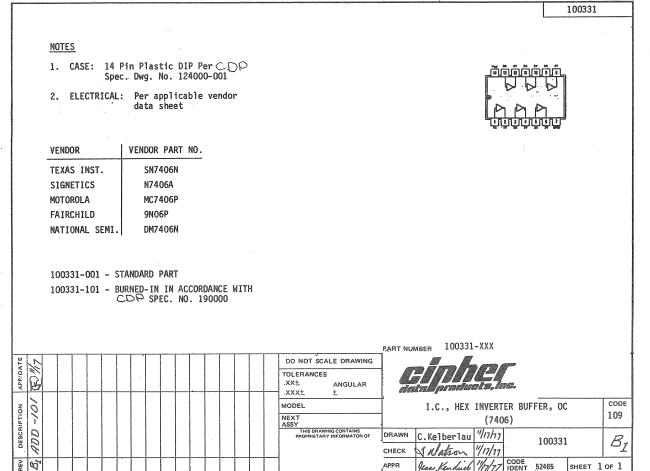
SYMBOL	NAME	LOGICAL EQUATION
<u>A</u> B	NEGATIVE INVERTER	8 = Ā
<u>A</u> <u>B</u>	POSITIVE INVERTER	B = Ā
ê D-°	POSITIVE NAND GATE	D * ABC
å D	NEGATIVE NOR GATE	D = A + B + C
A O D D	NEGATIVE WIRED OR GATE	D = A+B+C
	FLIP-FLOP (J-K)	SEE Truth Table
os os	ONE-SHOT	SEE EXPLANATION
A OLY B	TIME DELAY NETWORK	8 = A · [OLY]

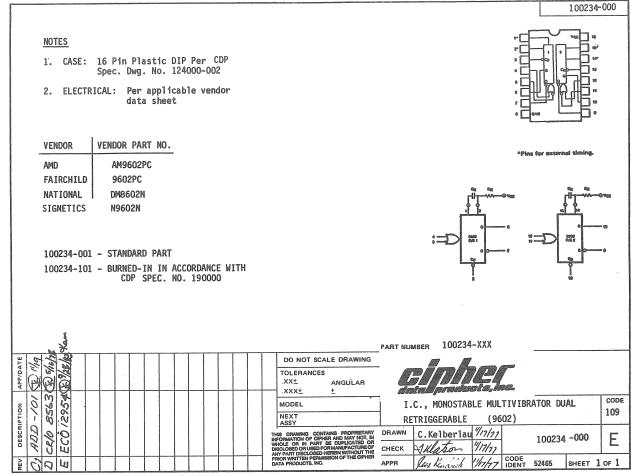
1.5 LOGIC SCHEMATICS

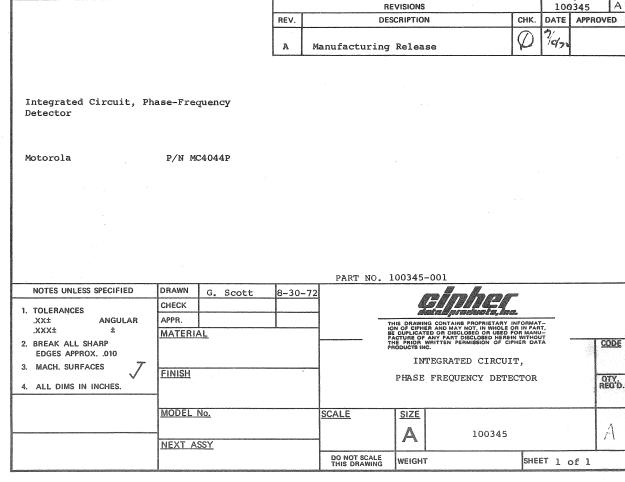
The following listed logic schematics are provided:

			Dwg. No.
Schematic, Main PWB		 s • • •	 207002-200
Schematic, Controller PWB		 	 207005-200
Schematic, Microcomputer Expander	PWB	 	 20/011-200
Schematic, Motor Driver PWB		 	 207017-200
Schematic, Main PWB		 	 207066-200
Schematic, Motor Driver PWB		 	 207069-200
Schematic, Motor Driver PWB		 	 207076-200

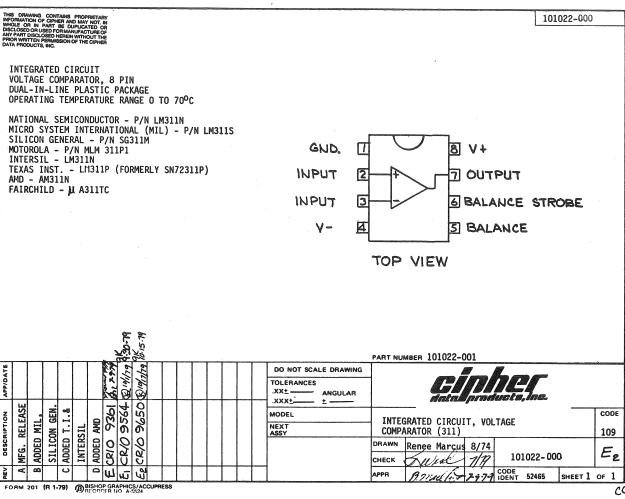


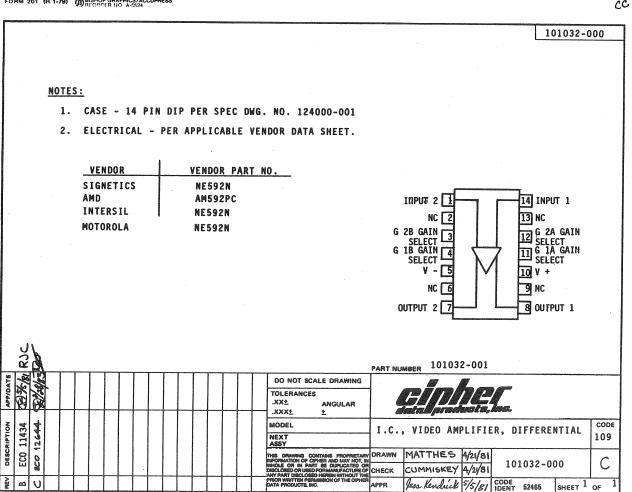




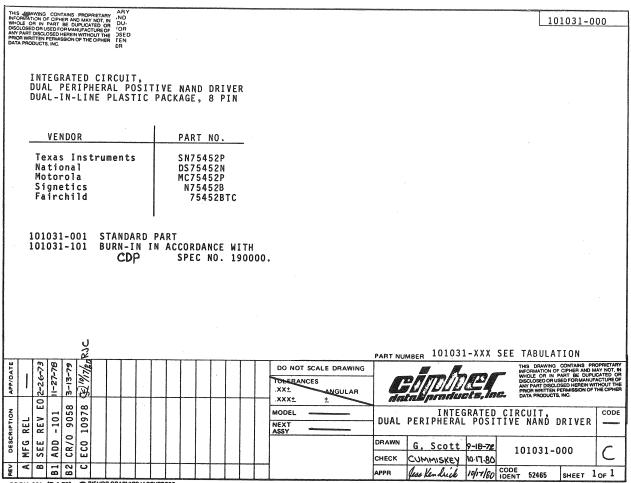


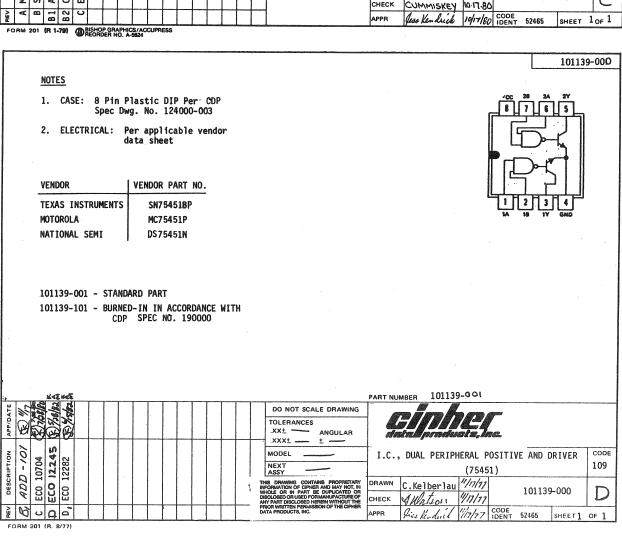
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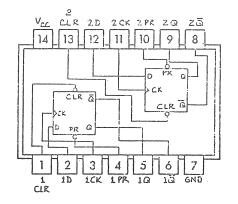
FORM 201 (R 1-79) BISHOP GRAPHICS/ACCUPRESS





- 1. CASE 14 Pin Plastic DIP Per Spec. Dwg. No. 124000-001
- 2. ELECTRICAL PARAMETERS Per the Applicable Vendor Data Sheets
- 3. OPERATING TEMP. 0° C to $+70^{\circ}$ C

VENDOR	VENDOR PART NO.
TEXAS INST.	SN74S74N
SIGNETICS	N74S74N
NATIONAL	DM74S74N
FAIRCHILD	74S74PC



123023-001 - STANDARD PART 123023-101 - BURNED-IN IN ACCORDANCE WITH CIPHER DATA SPEC NO. 190000.

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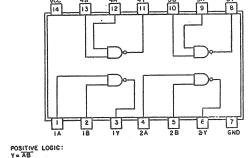
NOTES:

1. CASE - 14 Pin Plastic DIP Per Spec. Dwg. No. 124000-001

2. MATERIAL -

Case - Plastic or Ceramic Leads - Plated (Gold, Tin or Bright Solder Dipped)

3. ELECTRICAL PARAMETERS - Per the Applicable Vendor Data Sheets



VENDOR	PART NO.
National	DM74LS00 (N,J)
Signetics	N74LS00 (A,F)
Texas Inst.	SN74LS00 (N,J)
Fairchild	F74LS00 (P,D)C
Motorola	SN74LSOON

123029-001 STANDARD PART

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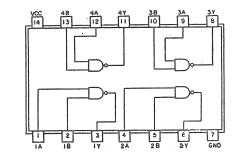
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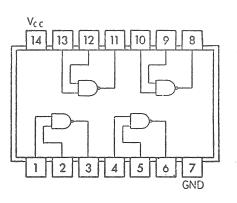
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Part No. 123029-XXX

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- 1. PACKAGE 14 Pin Plastic DIP Per Spec. Dwg. No. 124000-001
- 2. ELECTRICAL PARAMETERS Per the Applicable Vendor Data Sheets
- 3. OPERATING TEMP. 0°C to +70°C

/ENDOR	PART NO.
Texas Inst.	SN74S00N 74S00PC
airchild	7430010



123028-001 - STANDARD PART 123028-101 - BURNED-IN IN ACCORDANCE WITH CIPHER DATA SPEC NO. 190000

Part No. 123028-XXX

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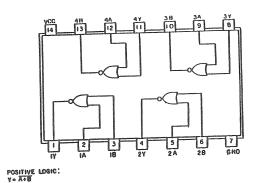
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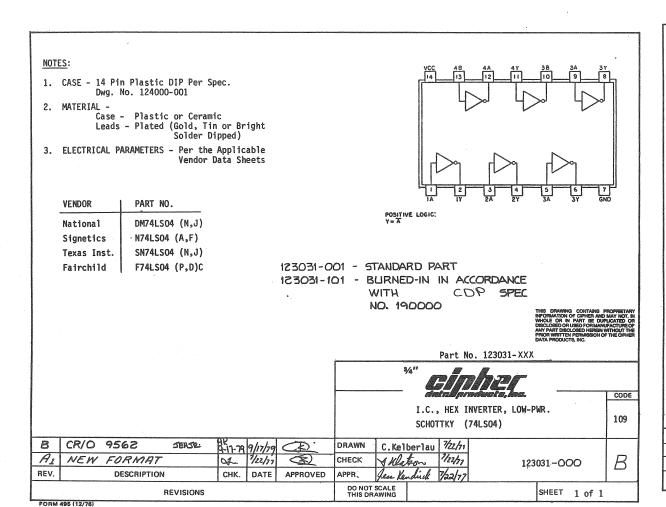
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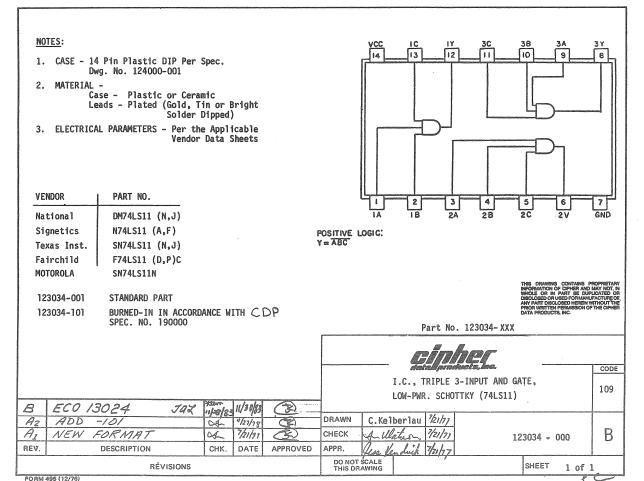
VENDORS:	PART NUMBERS
NAT IONAL	DM74LS02 (N;J)
SIGNETICS	N74LS02 (A,F)
TEXAS INST.	SN74LSO2 (N,J)
FAIRCHILD	F74LS02 (P,D) C

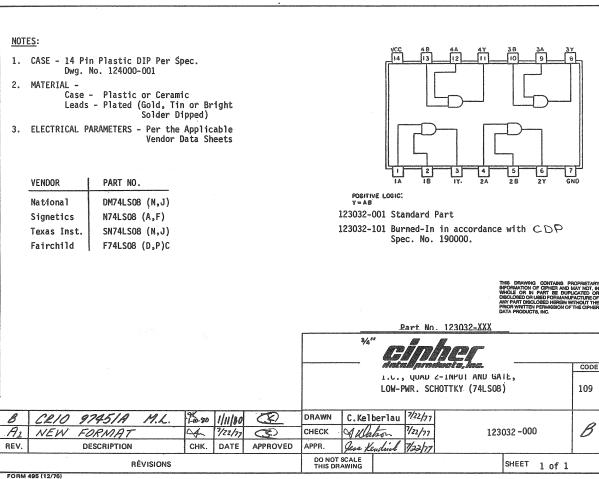


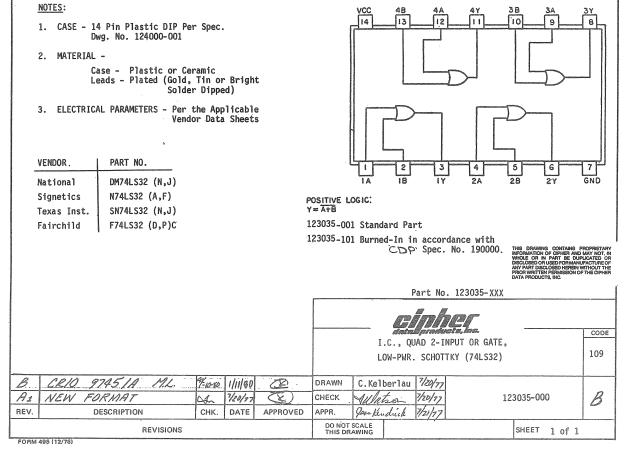
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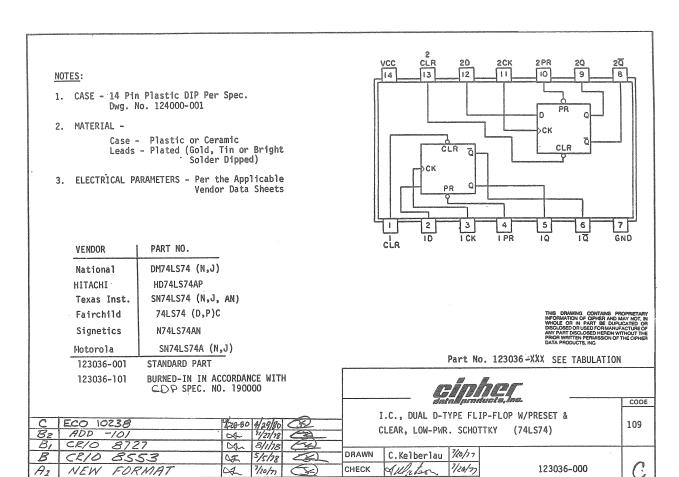
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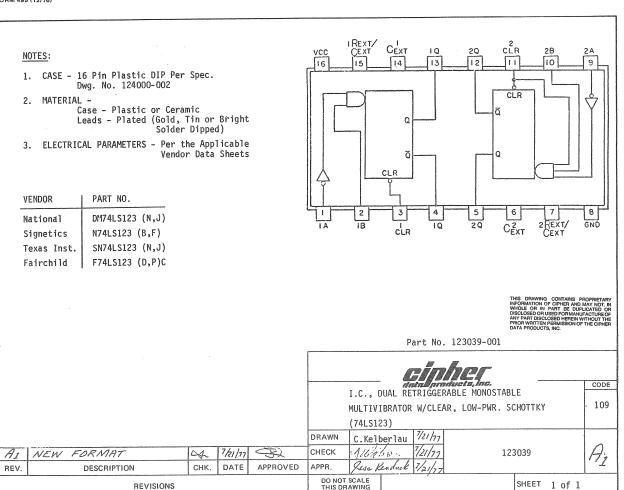
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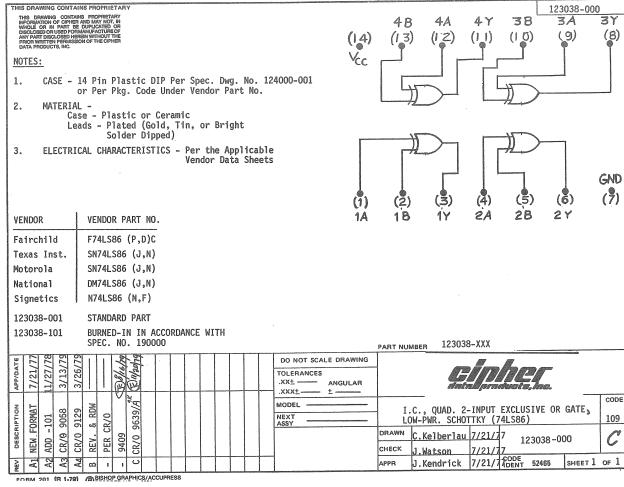
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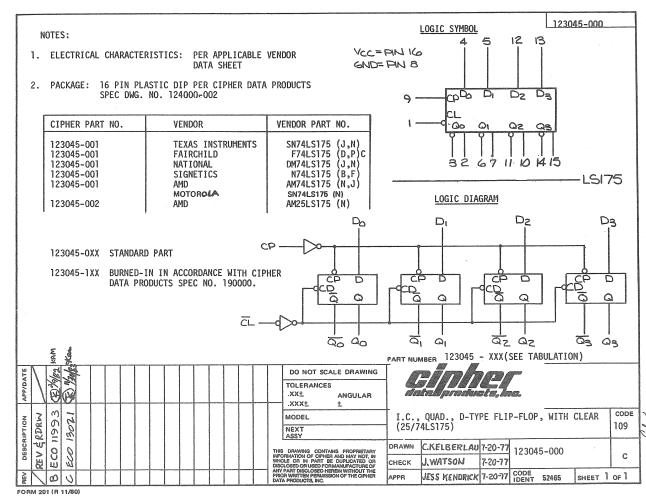
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- 1. CASE 14 Pin Plastic DIP Per Spec. Dwg. No. 124000-001
- 2. MATERIAL -

Case - Ceramic or Plastic Leads - Plated (Gold, Tin or Bright Solder Dipped)

3. ELECTRICAL PARAMETERS - Per the Applicable Vendor Data Sheets

VENDOR	VENDOR PART NO.				
Signetics	N74S04 (A,F)				
Fairchild	F74S04 (P,D)C				
National	DM74SO4 (N,J)				
Texas Inst.	SN74SO4 (N,J)				

123046-001 Standard Part

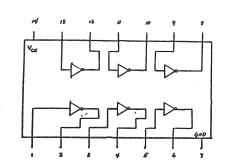
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123046-101 Burned-In In Accordance With Cいや Spec. No. 190000

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Part No. 123046-XXX

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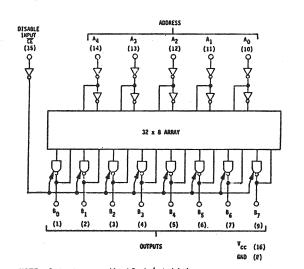
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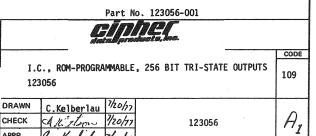
NOTES:

- 1. CASE 16 Pin Plastic DIP Per Spec: Dwg. No. 124000-002
- 2. MATERIAL: Case Plastic or Ceramic Leads - Plated (Gold, Tin or Bright Solder Dipped)
- 3. ELECTRICAL CHARACTERISTICS Per the Applicable Vendor Data Sheets
- 4. The Integrated Circuit described in this spec. must be further modified by programming prior to use.

VENDOR	VENDOR PART NO.
SIGNETICS	N82S123B or N82S123F
INTERSIL	IM5610CPE or IM5610CJE

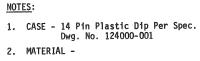


NOTE: Outputs are disabled (at high impedance state) when CE is at logical high state.



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Case - Plastic or ceramic Leads - Plated (Gold, Tin, or Bright Solder Dipped)

3. ELECTRICAL PARAMETERS - Per the Applicable Vendor Data Sheets

VENDOR	VENDOR PART NO.
National	DM74LS14 (N,J)
Signetics	N74LS14 (A,F)
Texas Inst.	SN74LS14 (N,J)
Fairchild	F74LS14 (P,D)C

2A POSITIVE LOGIC:

123047-001 - STANDARD PART 123047-101 - BURNED-IN IN ACCORDANCE WITH C'DP SPEC NO. 190000.

Part No. 123047-XXX

CODE I.C., HEX INVERTER, SCHMITT-TRIGGER, LOW-PWR 109 SCHOTTKY (74LS14) DRAWN C. Kelberlau 1/20/27

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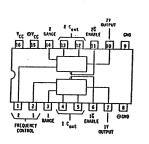
CASE: 16 Pin Plastic DIP Per Spec Dwg. No. 124000-002

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ELECTRICAL: Per The Applicable Vendor Data Sheets.

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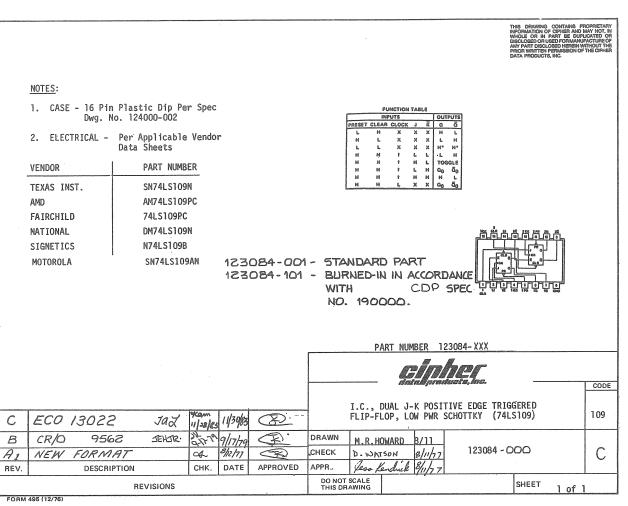


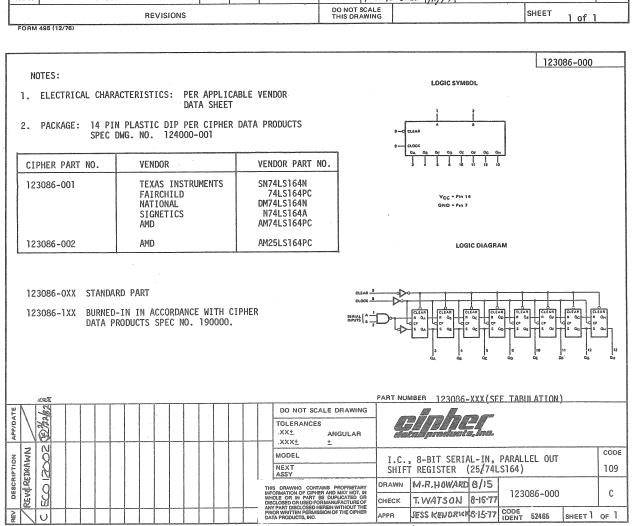
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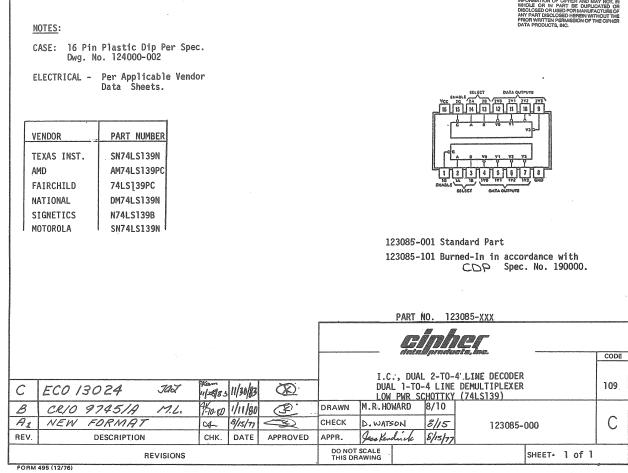
PART NUMBER 123069-001 GIDILL. CODE INTEGRATED CIRCUIT DUAL VOLTAGE-CONTROLLED OSCILLATORS, SCHOTTKY - 74S124 109 DRAWN M.R.HOWARD 8/12 123069 A_{I} CHECK 8/15/11 CHK. DATE APPROVED APPR. Leve Kenduck 1/15/7

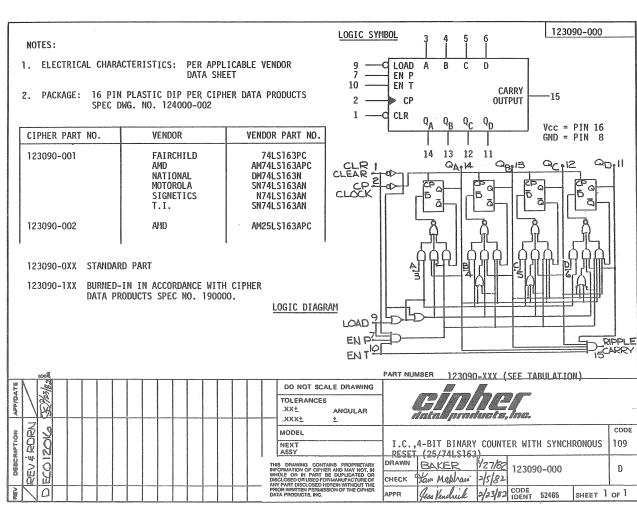
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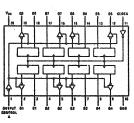








- 1. CASE 20 Pin Plastic Dip
- 2. ELECTRICAL Per applicable vendor



VENDOR	VENDOR PART NO.
AMD	AM74LS374PC
NATIONAL	DM74LS374N
FAIRCHILD	74LS374PC
TI	SN74LS374N
SIGNETICS	N74LS374N
MHI	SN74LS374N

123091-001 Standard Part 123091-101 Burned-In in accordance with $\ensuremath{\text{CDP}}$ Spec. No. 190000.

Part No. 123091-XXX

								MET.	
								IP-FLOPS, TRI-STATE	CODE
.C.O. 10096	11.2.	98 3650	3/6/80	(34)	-	LOW	PWR SC	HOTTKY (74LS374)	109
X 0 474579	12.	1-10-10	1/11/60	(<u>\$</u>	DRAWN	C.Kelberlau	1/12/17		0
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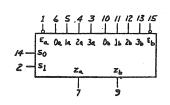
FORM 495 (12/76)

SHEET 1 of 1

NOTES:

- 1. GASE 16 Pin Plastic Dip Per Spec. Dwg. No. 124000-002.
- 2. ELECTRICAL Per Applicable Vendor Data Sheets

VENDOR	VENDOR PART NO.
AMD	AM74LS153PC
FAIRCHILD	74LS153PC
NATIONAL	DM74LS153N
SIGNETICS	N74LS153B
T. I.	SN74LS153N

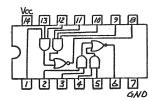


LOGIC/PIN CONFIGURATION

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noman and a second						Part No.	123095-001		
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NOTES:

- 1. CASE 14 Pin Plastic Dip Per Spec. Dwg. No. 124000-001
- 2. ELECTRICAL Per Applicable Vendor Data Sheets



VENDOR	VENDOR PART NUMBER
AMD	AM74LS51PC
FAIRCHILD	74LS51PC
NATIONAL	DM74LS51N
SIGNETICS	N74LS51A
т. І.	SN74LS51N

LOGIC/PIN CONFIGURATION

Part No. 123093-001

I.C., DUAL 2-WIDE 2-INPUT/3-INPUT AND-OR 109 INVERT GATE LOW PWR SCHOTTKY (74LS51)

CODE

123096-000

LOGIC SYMBOL LS174

DRAWN C. Kelberlau 16/77 A_1 123093 CHECK question 7/6/77 Q 1/6/17 S CHK. DATE APPROVED APPR. Pass Kindrick 7/7/77 DO NOT SCALE THIS DRAWING SHEET 1 of 1

REV.

A1 NEW FORMAT

DESCRIPTION

1. ELECTRICAL CHARACTERISTICS: PER APPLICABLE VENDOR

2. PACKAGE: 16 PIN PLASTIC DIP PER CIPHER DATA PRODUCTS SPEC DWG. NO. 124000-002

REVISIONS

CIPHER PART NO.	VENDOR	VENDOR PART NO
123096-001 123096-002	AMD FAIRCHILD NATIONAL SIGNETICS TEXAS INSTRUMENTS MOTOROLA AMD	AM74LS174PC 74LS174PC DM74LS174N N74LS174N SN74LS174N SN74LS174N AM25LS174PC

Vcc = PIN 15 GND = PIN 8 LOGIC DIAGRAM LS174

123096-OXX STANDARD PART

123096-1XX BURNED-IN IN ACCORDANCE WITH CIPHER DATA PRODUCTS SPEC NO. 190000.

PART NUMBER: 123096-XXX (SEE TABULATION) DO NOT SCALE DRAWING .xxx± CODE MODEL I.C., HEX D FLIP-FLOP WITH CLEAR 109 (25/74LS174) RAWN M.R.HOWARD 8/10 123096-000 D T.WATSON J. KENDRICK 8/19/77 CODE 52465 SHEET 1 OF 1



Vcc M M M M M M M M
1 2 3 4 5 6 7 8 E GNO

VENDÓR	VENDOR PART NO.
AMD	AM74LS367PC
FAIRCHILD	74LS367PC
NATIONAL	DM74LS367N
SIGNETICS	N74LS367B
T. I.	SN74LS367N
Hotorola	SN74LS367AN

LOGIC/PIN CONFIGURATION

123097-001 - STANDARD PART 123097-101 - BURNED-IN IN ACCORDANCE WITH CDP SPEC NO. 190000.

Part No. 123097-XXX

CODE HEX 3-STATE BUFFER, SEPARATE 2-BIT SECTIONS, 109 LOW PWR SCHOTTKY (74LS367) B

B CR/O 9562 A2 CR/O 9190 DRAWN C. Kelberlau 1/7/17 CHECK & Walson 1/1/11 NEW FORMAT a 1/1/11 @ Jess Kendrick 7/7/77 REV. DESCRIPTION CHK. DATE APPROVED APPR. DO NOT SCALE THIS DRAWING REVISIONS

SHEET 1 of 1

123097 - 000

FORM 495 (12/76)

NOTES:

E ECO 12298

CR/O

B

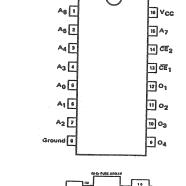
REV.

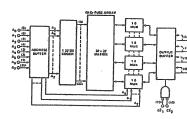
1. CASE - 16 Pin Plastic or Ceramic Per Spec. Dwg., No. 124000-002.

2. MECHANICAL & ELECTRICAL - Per Applicable Vendor Data Sheet

VENDOR	VENDOR PART NO.
Signetics	N82S129N,N82S129F
Fairchild	93427 PC,93427DC
NATIONAL	DM74S287N

Jaz





	GINNES, Inc.
 ٢	1024_RIT RIPOLAR

Part No. 123106-001

6/21/82-6/22/82 ECO 12136 ev CODE I.C., 1024-BIT BIPOLAR PROGRAMMABLE ROM (256X4 PROM) CR/0 9834 112 1-7-80 10-80 1/11/80 109 WITH TRI-STATE OUTPUTS 9340 CR/0 - 8996 (I) DRAWN C. Kelberlau 4/21/77 CHECK Milation 4/21/77 MFG. RELEASE (3) A 6/21/17 123106- 000 Jess Kendrick 9/21/7 DESCRIPTION CHK. DATE APPROVED APPR. DO NOT SCALE THIS DRAWING SHEET 1 of 1

NOTES:

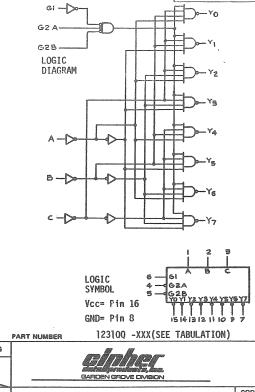
1. ELECTRICAL CHARACTERISTICS: PER APPLICABLE VENDOR

2. PACKAGE: 16 PIN PLASTIC DIP PER CIPHER DATA PRODUCTS SPEC DWG. NO. 124000- 002

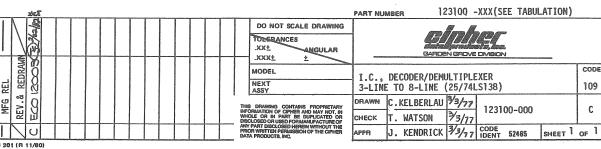
CIPHER PART NO.	VENDOR	VENDOR PART NO.
123100-001 123100-001 123100-001 123100-001 123100-001	AMD FAIRCHILD NATIONAL SIGNETICS TEXAS INST.	AM74LS138PC 74LS138PC DM74LS138N N74LS138A SN74LS138N
123100-002	AMD	AM25LS138PC

123100 - OXX STANDARD PART

123100-1XX BURNED-IN IN ACCORDANCE WITH CIPHER DATA PRODUCTS SPEC NO. 190000.



123100-000



NOTES:

1. CASE - 16 Pin Plastic or Ceramic Per Spec Dwg. 124000-002.

2. ELECTRICAL & MECHANICAL - Per Applicable Vendor Data Sheet

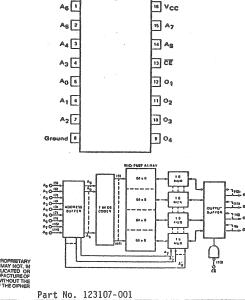
VENDOR	VENDOR P/N
Signetics	N82S131N,N82S131F
Harris	HM1-7621-5,HM3-7621-5
Fairchild	93446PC,93446DC
AMD	AM27S13DC
NATIONAL	DM74S571N

ECO 12136

CR/O 9834 111-1-80

B

REV.



GINDDES. I.C., 2048-BIT BIPOLAR PROGRAMMABLE ROM (512X4 PROM), WITH TRI-STATE OUTPUTS

CODE

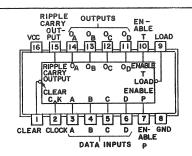
109

1-10-20 1/11/BO D. ULLOA CR/0 - 8996 J. DRAWN C. Kelberlau 6/21/17 123107-00D MFG. RELEASE CHECK CANALLES C <u>(F)</u> DESCRIPTION CHK. DATE APPROVED APPR. Jan Kuluci DO NOT SCALE THIS DRAWING REVISIONS SHEET 1 of 1

1. CASE -

16 Pin Plastic DIP Per Spec Dwg. No. 124000-002

2. ELECTRICAL - Per Applicable Vendor Data Sheet



VENDOR	VENDOR PART NO.
Texas Inst.	SN74S163N

Part No. 123119-001

einher CODE I.C., SYNCHRONOUS 4-BIT COUNTER 109 (74\$163) . Kelberlau 6/9/17 DRAWN A

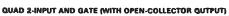
4 6/9/17 49/17 (3) CHECK ANCalan. 123119 A MFG. RELEASE CHK. DATE APPROVED APPR. DESCRIPTION Dear Kin in / 6/9/17 REV. DO NOT SCALE THIS DRAWING REVISIONS

NOTES:

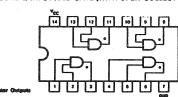
1. CASE -

14 Pin Plastic DIP Per Spec Dwg. No. 124000-001

2. ELECTRICAL - Per Applicable Vendor



SHEET 1 of 1



VENDOR	VENDOR PART NO.					
Signetics	SN74LSO9N					
Fairchild	SN74LSO9N					
Texas Inst.	SN74LSO9N					

Part No. 123123-001

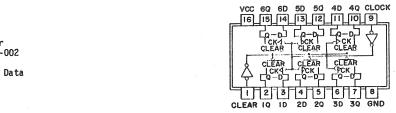
CODE I.C., QUAD 2-INPUT AND GATE WITH OPEN COLLECTOR OUTPUT (74LS09) 109

					DRAWN	C. Kelbe	rlau 4/22/17	-			
A	MFG. RELEASE	Q.	6/22/17	Œ	CHECK	1 Water	1/21/77	1231	.23		A
REV.	DESCRIPTION	CHK.	DATE	APPROVED	APPR.	Jess Kend	uck /22/17				<u></u>
	REVISIONS				DO NOT THIS DR				SHEET	1 of 1	1

NOTES:

16 Pin Plastic DIP Per 1. CASE -Spec. Dwg. No. 124000-002

2. ELECTRICAL - Per Applicable Vendor Data Sheet



LOGIC / PIN CONFIGURATION

VENDOR	VENDOR PART NO.
Texas Inst.	SN74S174N
Signetics	N74S174N
Fairchild	74S174PC
National	DM74S174N
AMD	SN745174N
Contraction of the last of the	The second secon

E.C.O. 10016 M.L.

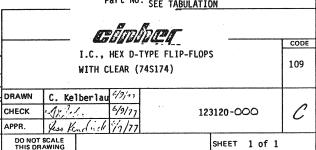
DESCRIPTION

123120-001 - STANDARD PART

123120-101 - BURNED-IN IN ACCORDANCE

WITH COP NO. 190000.

Part No. SEE TABULATION



FO 044 405 (10/2

A

REV.

FORM 201 (R. 8/77)

B CR10 9562

AI CR10 8946

MFG. RELEASE

1. CASE: 14 Pin Plastic DIP Per Spec. Dwg. No. 124000-001

3680 3/6/80 E

6/9/17

125/19 P. Paller

CHK. DATE APPROVED

(F)

2. ELECTRICAL: Per Applicable Vendor Data Sheet

JEHZ.

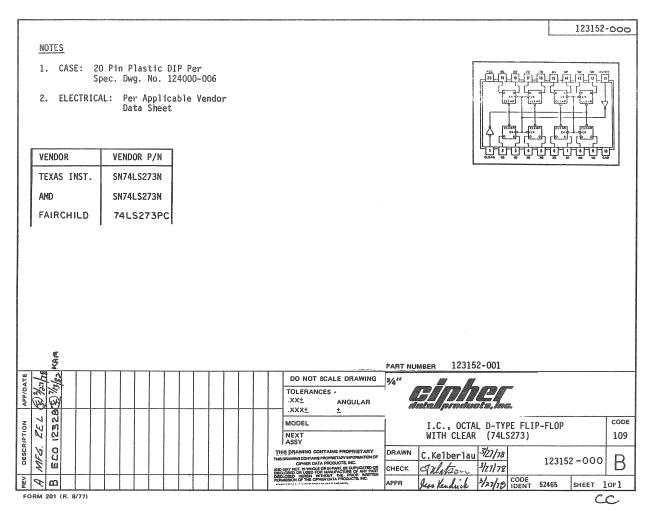
REVISIONS

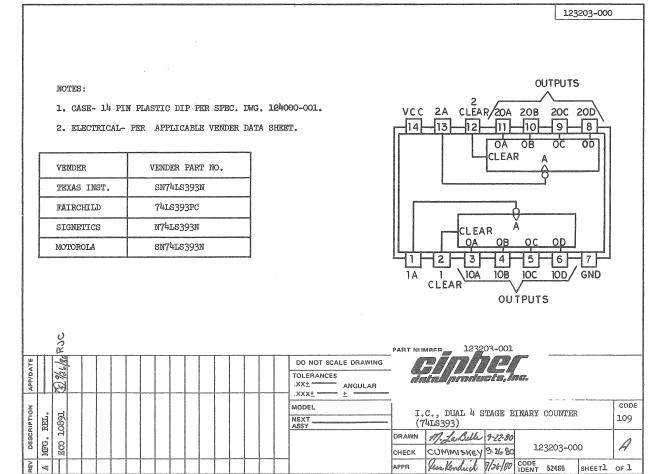
SHEET 1 of 1

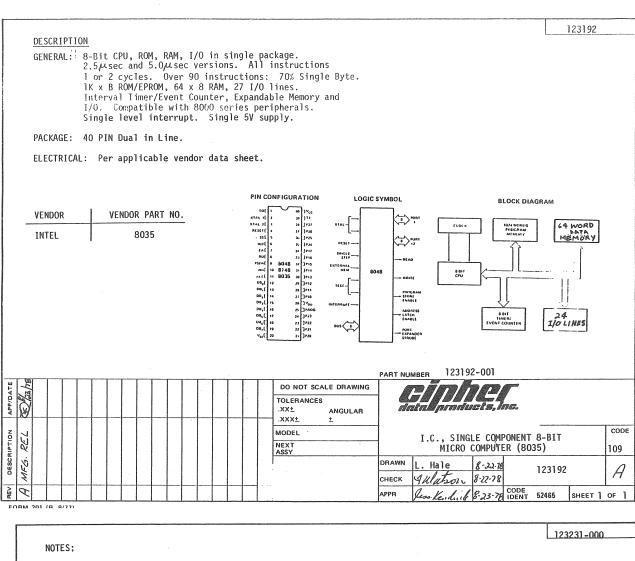
123149

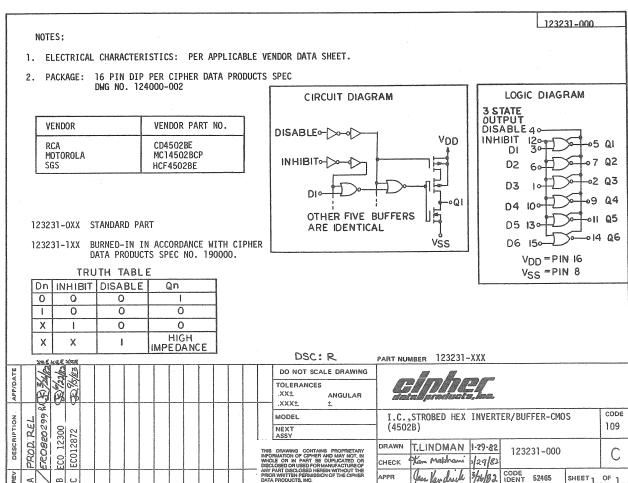
VENDOR	PART NUMBER
TEXAS INST.	SN74LSO1N
SIGNETICS	SN74LS01N
FAIRCHILD	SN74LS01N
AMD	SN74LS01N

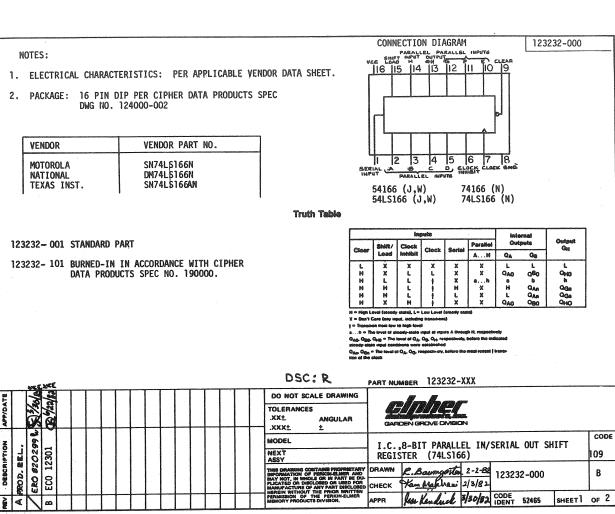
anno de contrata																PART NU	MBER 123149-001				
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APP/DA	1					1		1	_	\perp		1	_	-	TOLERANCES .XX± ANGULAR .XXX± ±		CIPINES atalproducts, Inc.				
z	12							MODEL	I.C., QUAD 2-INPUT POSITIVE												
RIPTION	100			ŀ		-	ļ				1		-		NEXT ASSY		NAND GATE W/OPEN COLL. (74LSO1) 10				
DESCR	12			1							1	-				DRAWN	C.Kelberlau 48/18 123149				
3	100														THIS DRAWING CONTAINS PROPRIETARY BEFORMANION OF CIPHER DATA PRODUCTS, INC. AND HAY NOT, IN VIROLE OR IN PART, SE DUPLICATED OR AND HAY NOT, IN VIROLE OR IN PART, SE DUPLICATED OR AND HAY NOT, IN VIROLE OR IN PART, SE DUPLICATED OR AND HAY NOT, IN VIROLE OR IN PART, SE DUPLICATED OR THE PARTY OF THE PARTY OF TH	CHECK	Allahon \$18/18				
REV	8					I									AND MAY NOT, BY WHOLE OR BY PART, BE DUPLICATED OR DECLOSED OR MASS FOR MANUFACTURE OF ANY PART DECLOSED WEREIN WITHOUT THE FROM WRITTEN PERMISSION OF THE CIPHER DATA PRODUCTS, BIC.	APPR	Seas Kendrik 3/10/18 CODE 52465 SHEET 1 OF 1				

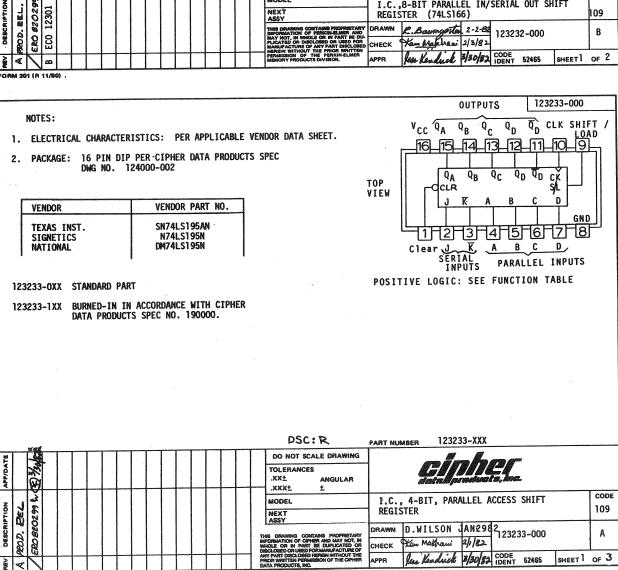


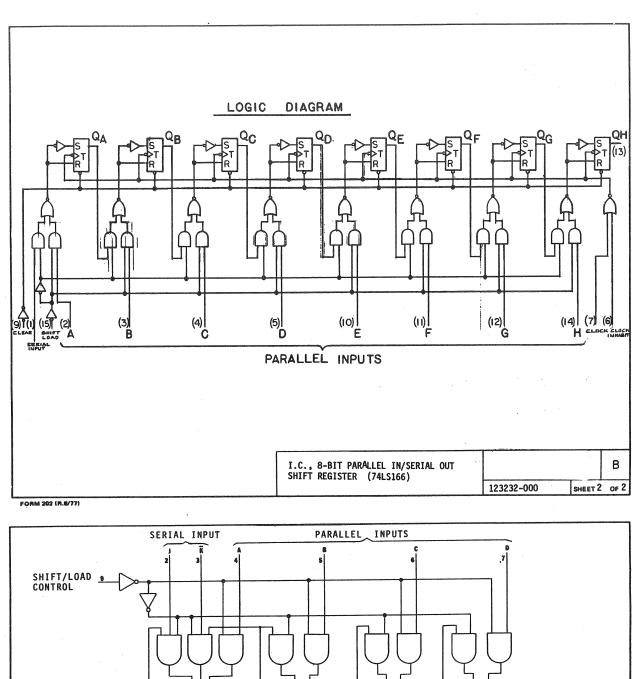


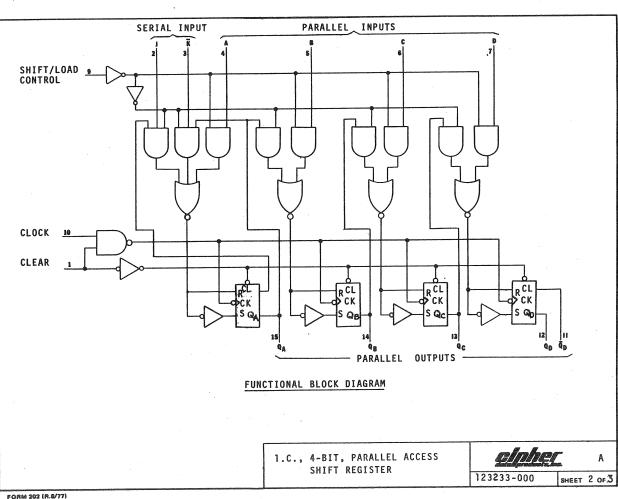


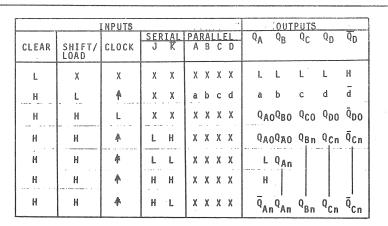












FUNCTION TABLE

H = high level (steady state)

L = low level (steady state)

X = irrelevant (any input, including transitions)

= transition from low to high level.

a,b,c,d, = the level of steady state input at A,B,C,or D, respectively.

 $Q_{AO},Q_{BO},\ Q_{CO},\ Q_{DO}=$ the level of $Q_A,Q_B,Q_C,$ or $Q_D,$ respectively, before the indicated steady state input conditions were established.

 Q_{An}, Q_{Bn}, Q_{Cn} = the level of Q_{A}, Q_{B} , or Q_{C} , respectively, before the most recent transition of the clock.

N.C., 4-BIT PARALLEL ACCESS
SHIFT REGISTER

EIDIF A

123233-000 SHEET 3 0 F 3

123235-000

FORM 202 (R.8/77)

NOTES:

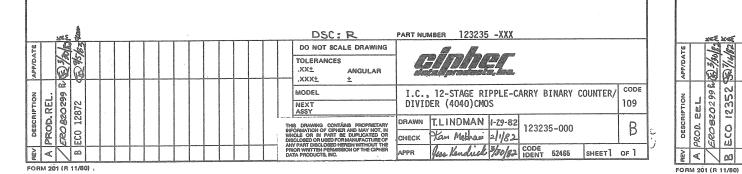
1. ELECTRICAL CHARACTERISTICS: PER APPLICABLE VENDOR DATA SHEET.

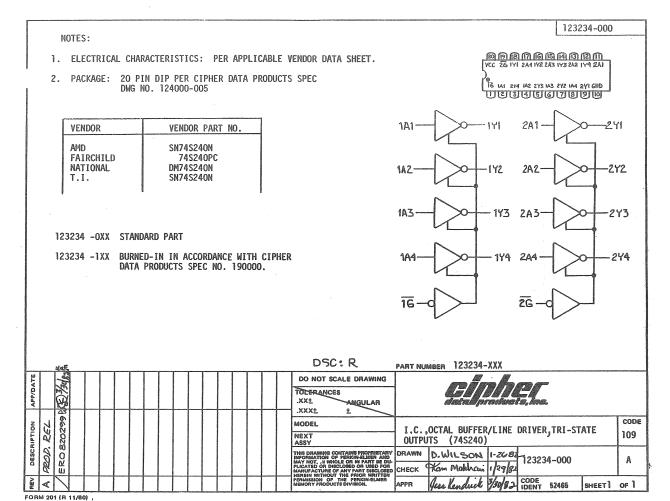
2. PACKAGE: 16 PIN DIP PER CIPHER DATA PRODUCTS SPEC DMG NO. 124000-002

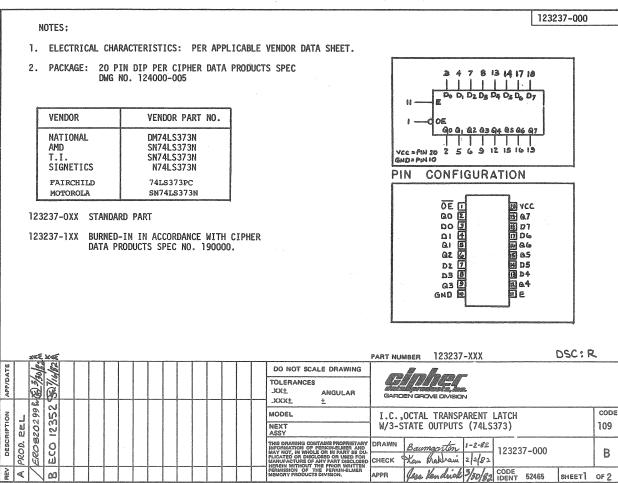
VENDOR -	VENDOR PART NO.
MOTOROLA	MC14040BCP
NATIONAL	CD4040CN
SGS	HCF4040BE

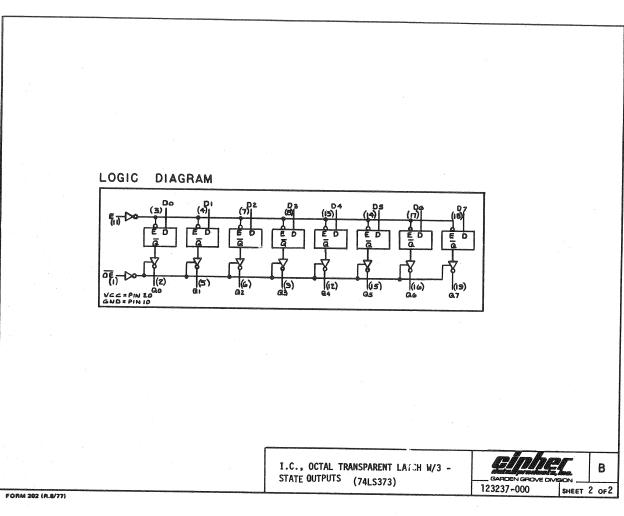
123235-OXX STANDARD PART

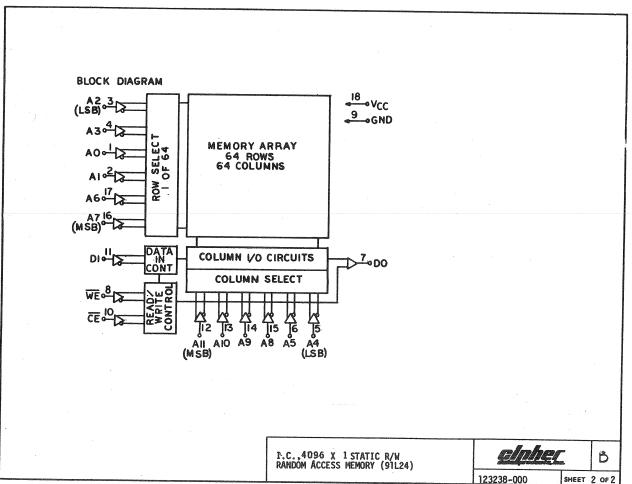
123235-1XX BURNED-IN IN ACCORDANCE WITH CIPHER DATA PRODUCTS SPEC NO. 190000.

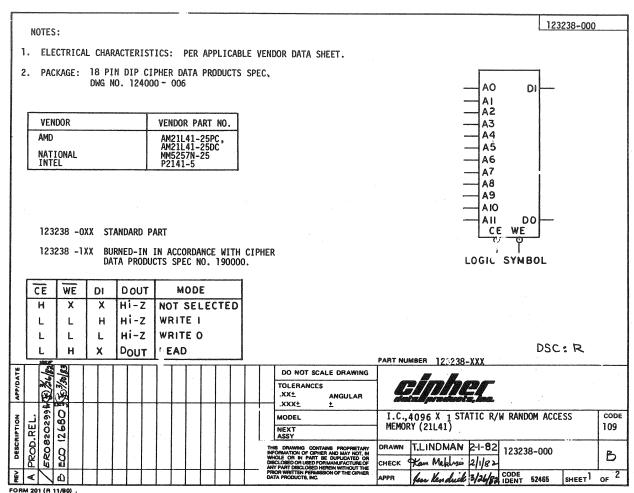


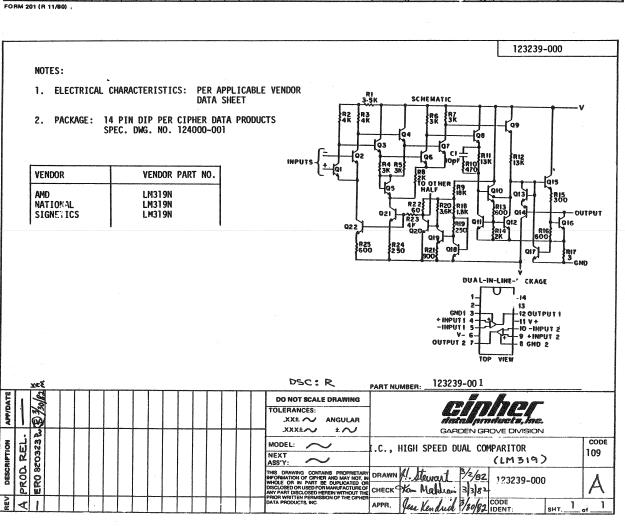




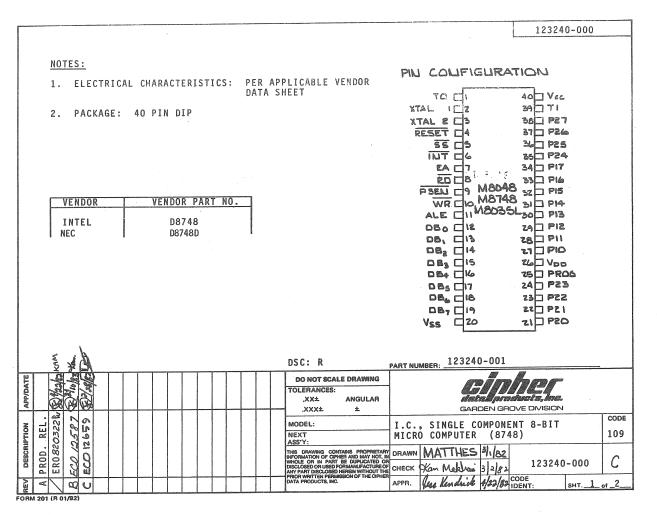


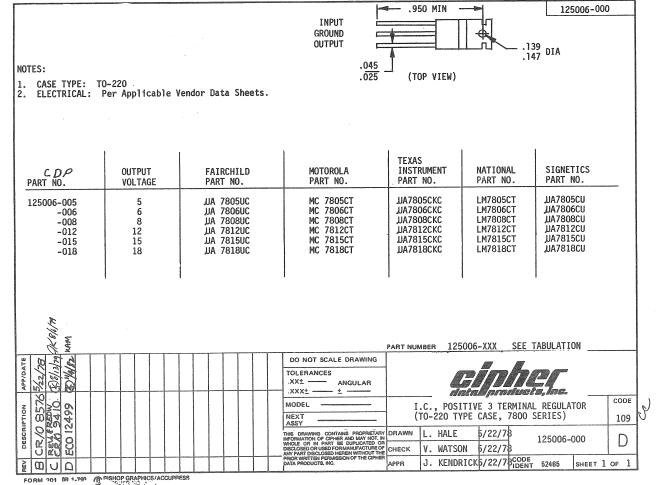


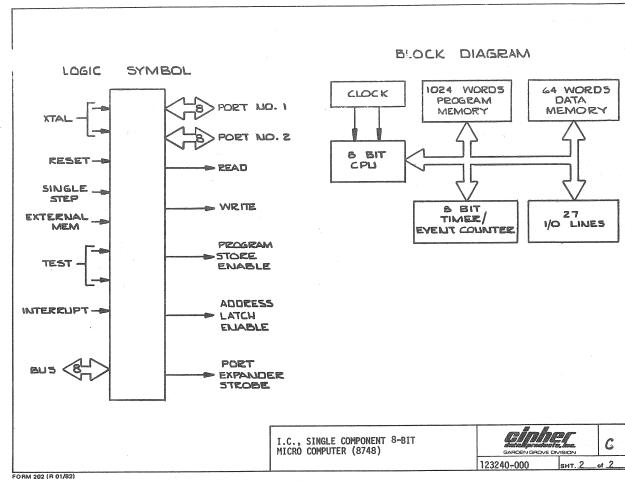


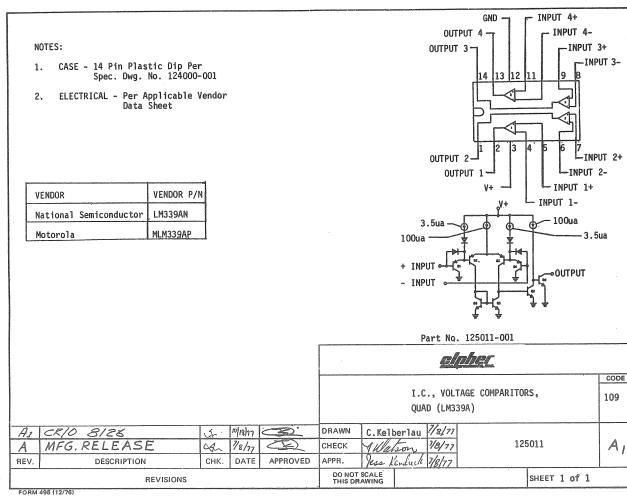


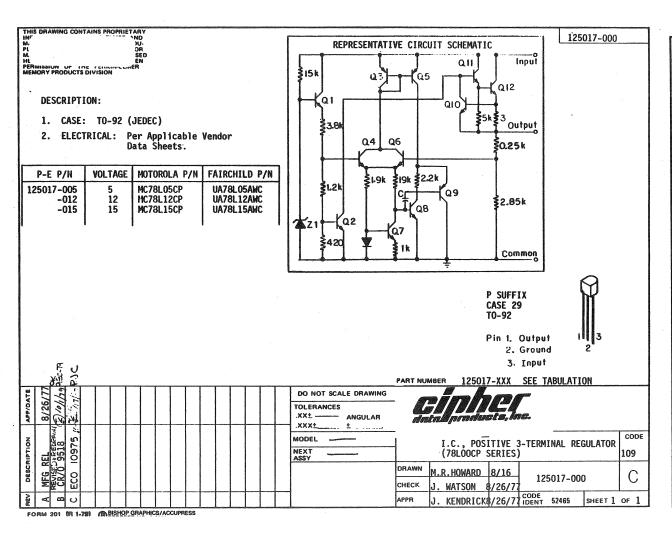
11b.

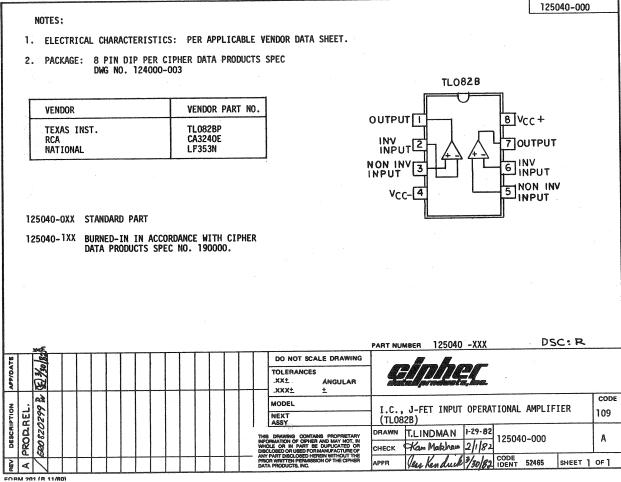


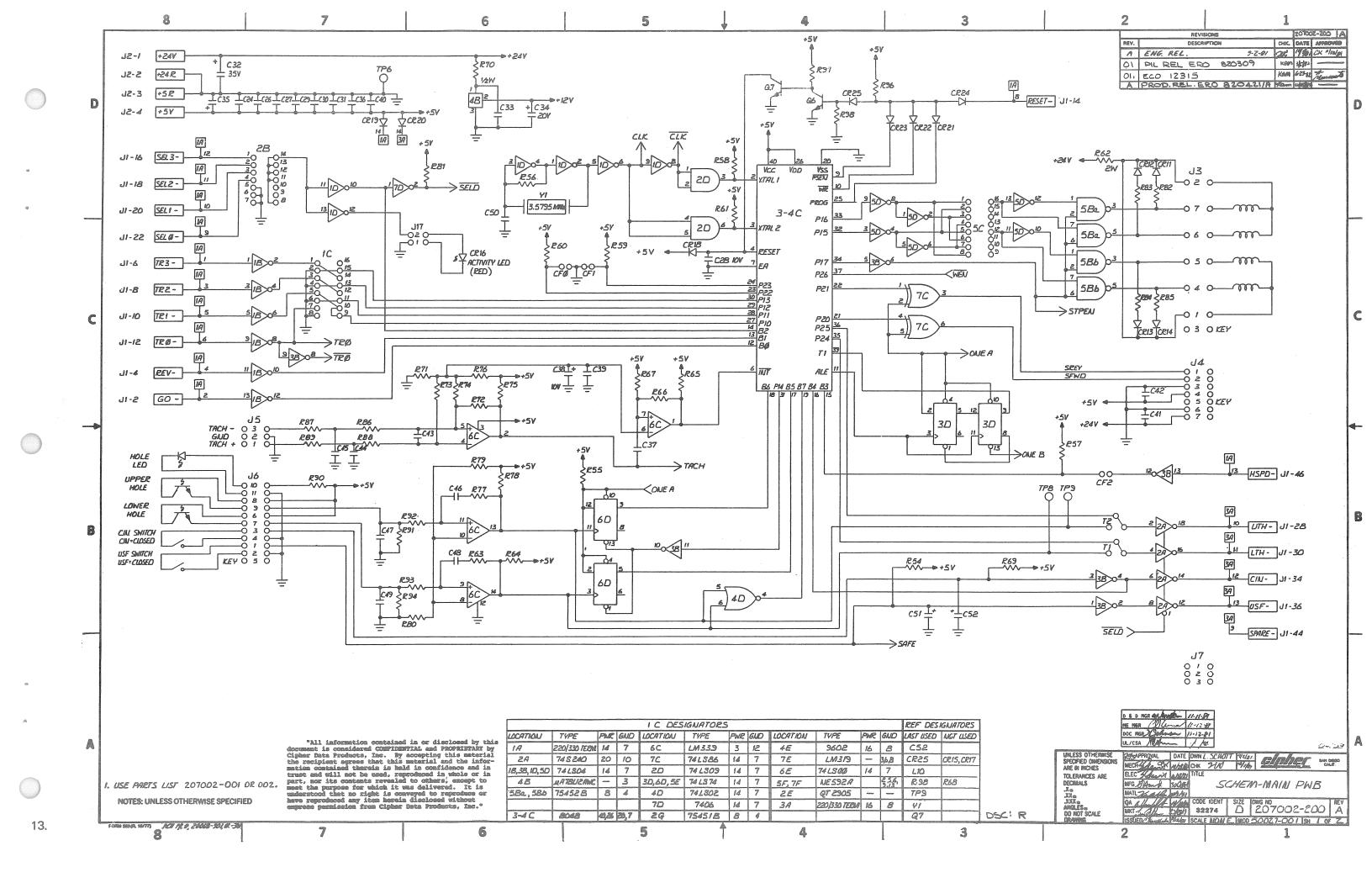


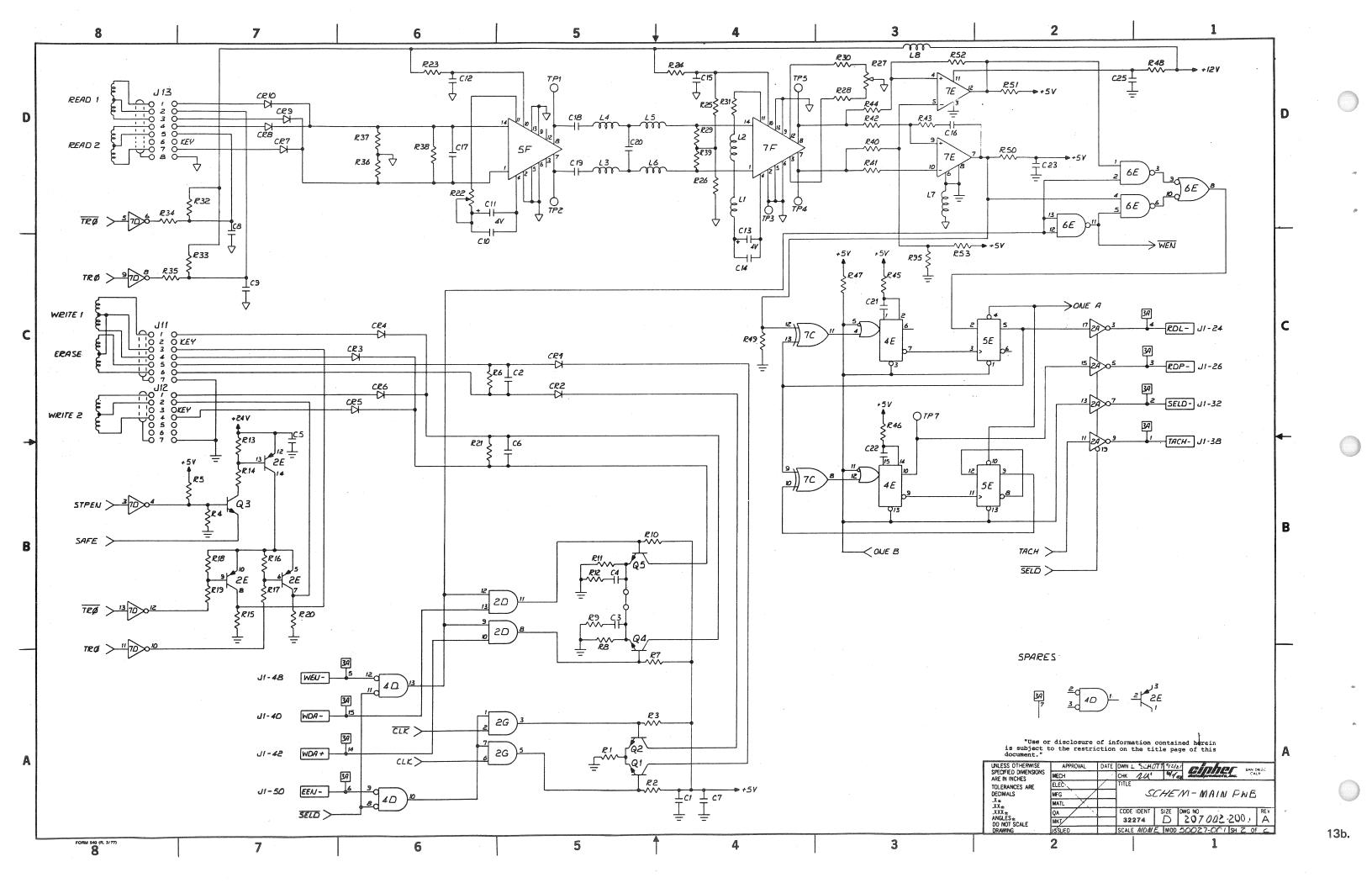


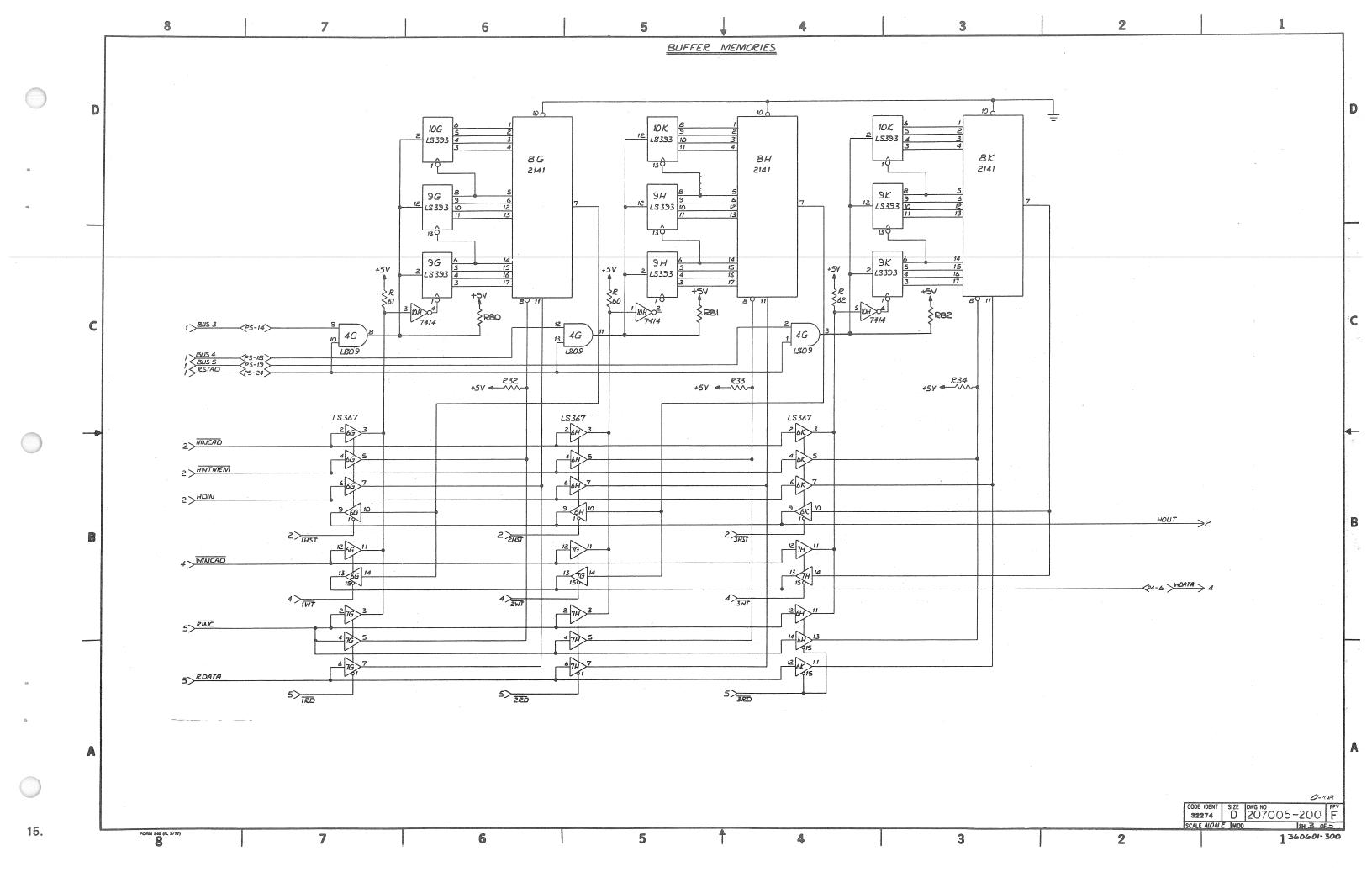


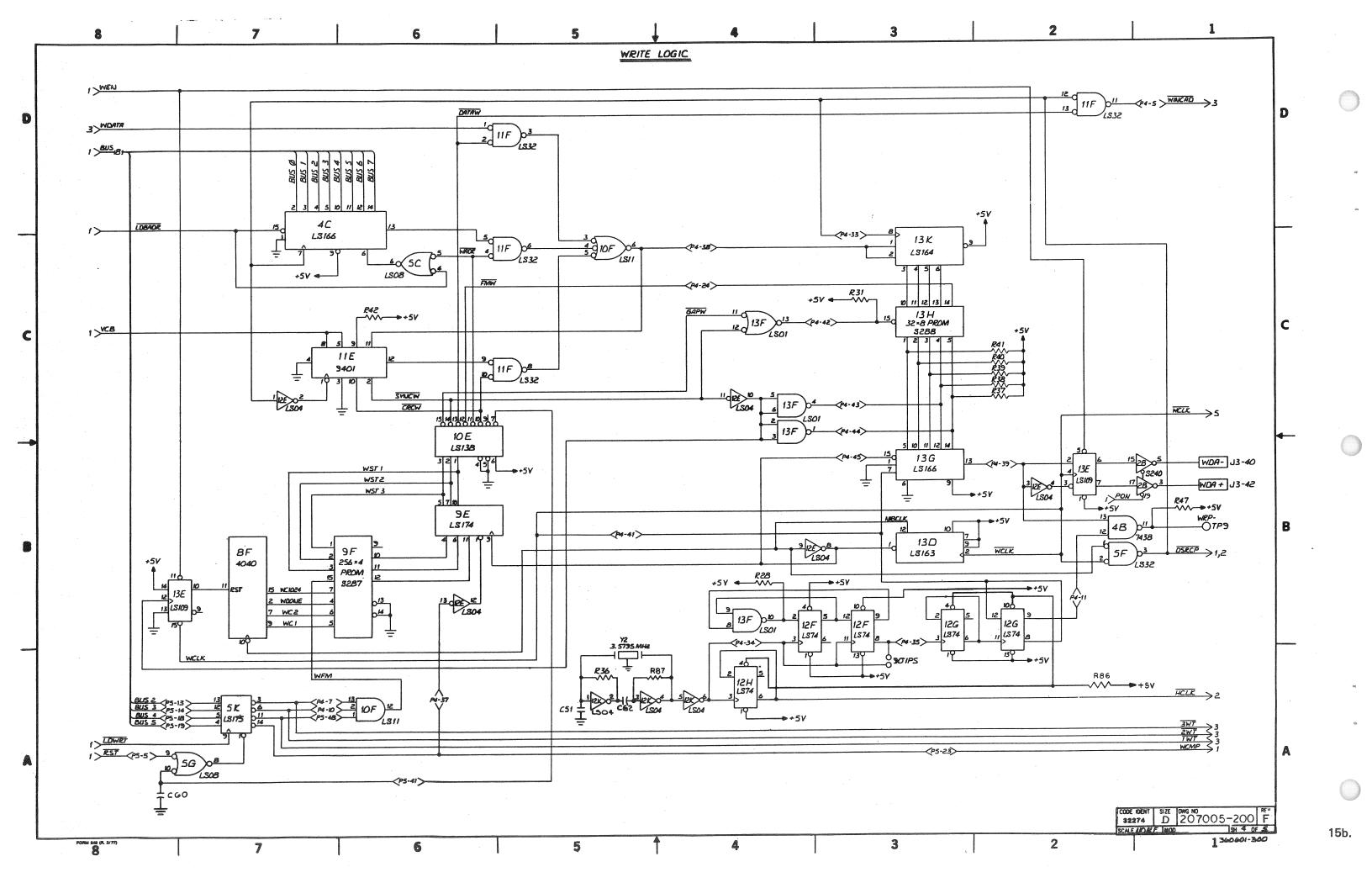


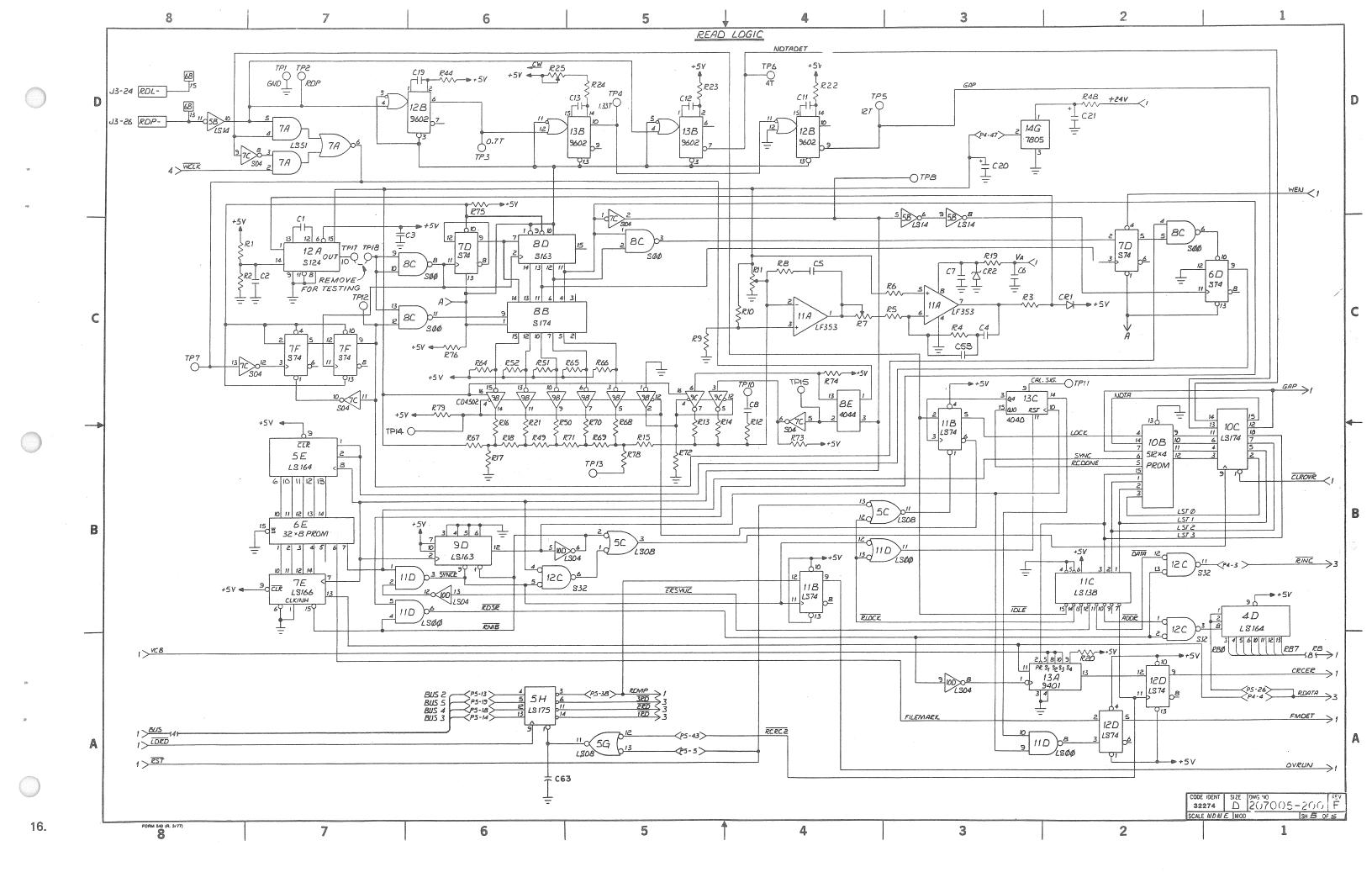


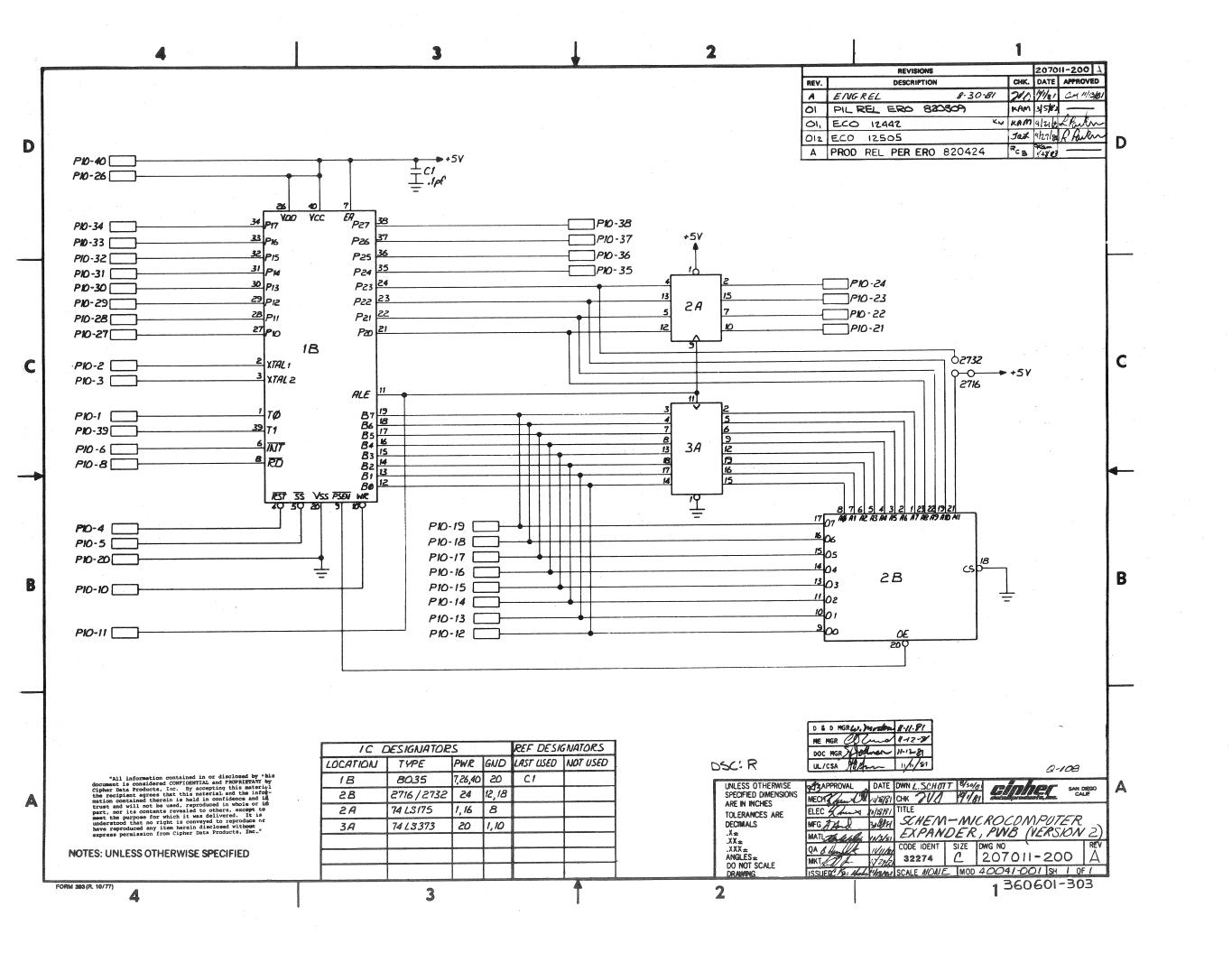


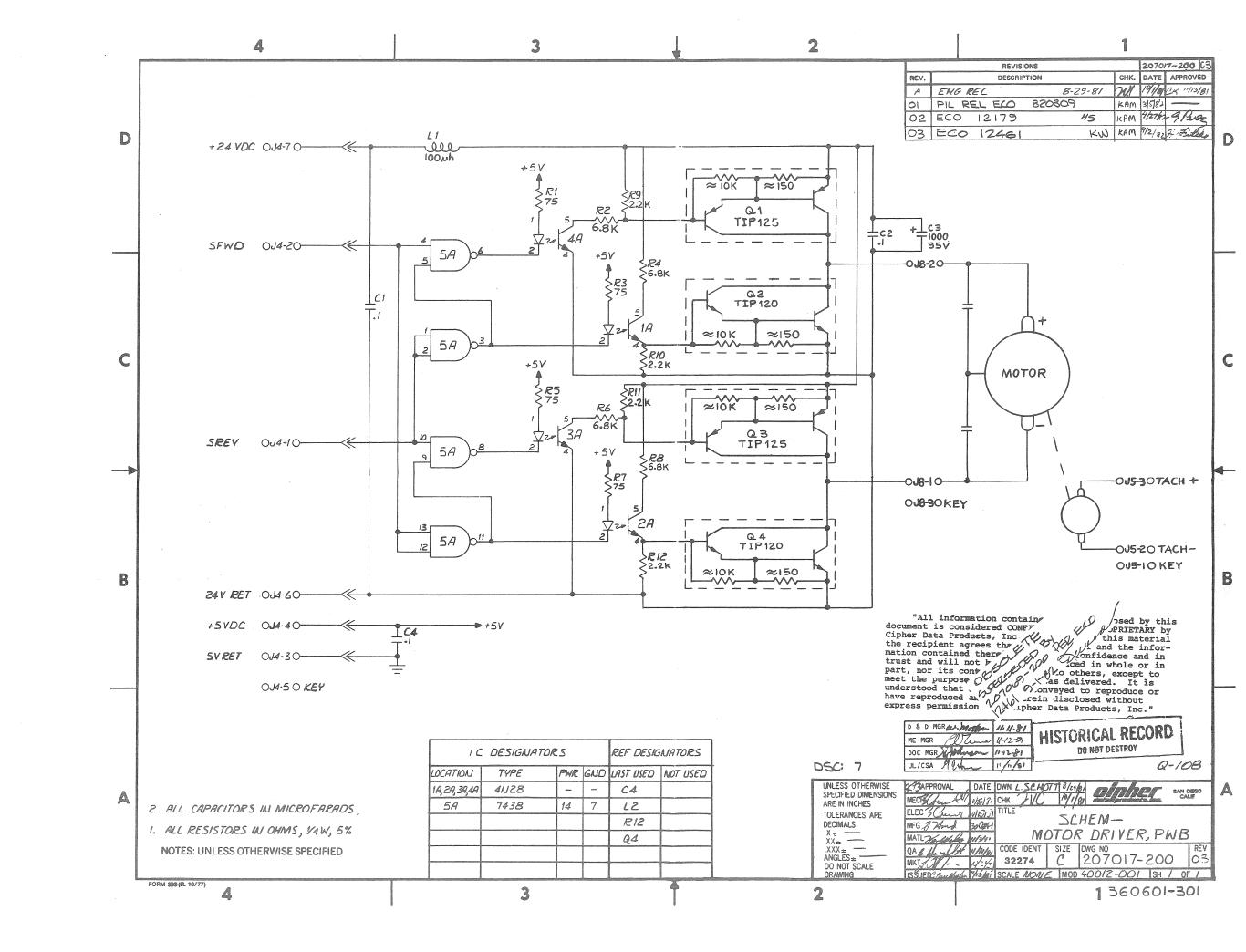




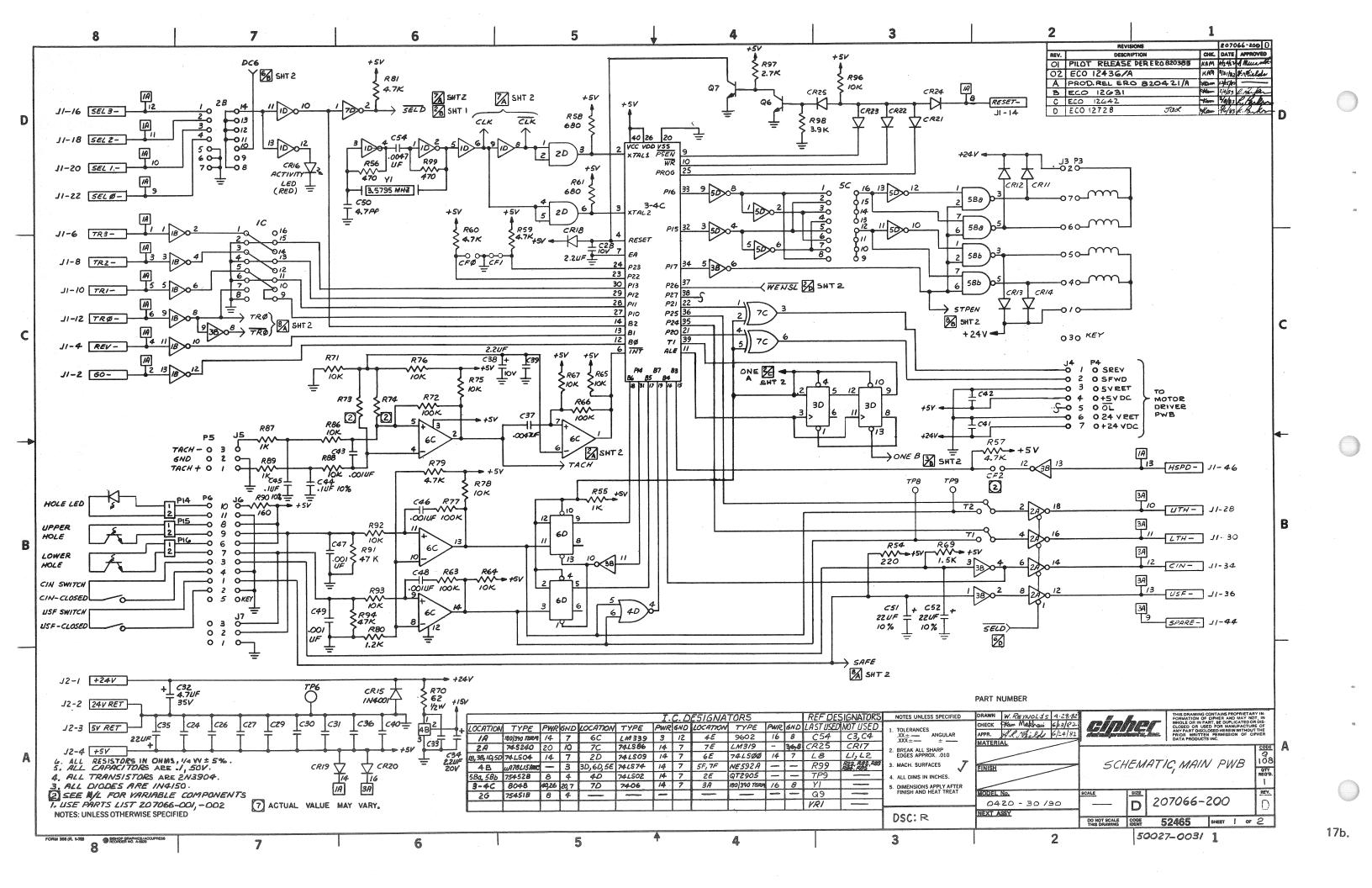


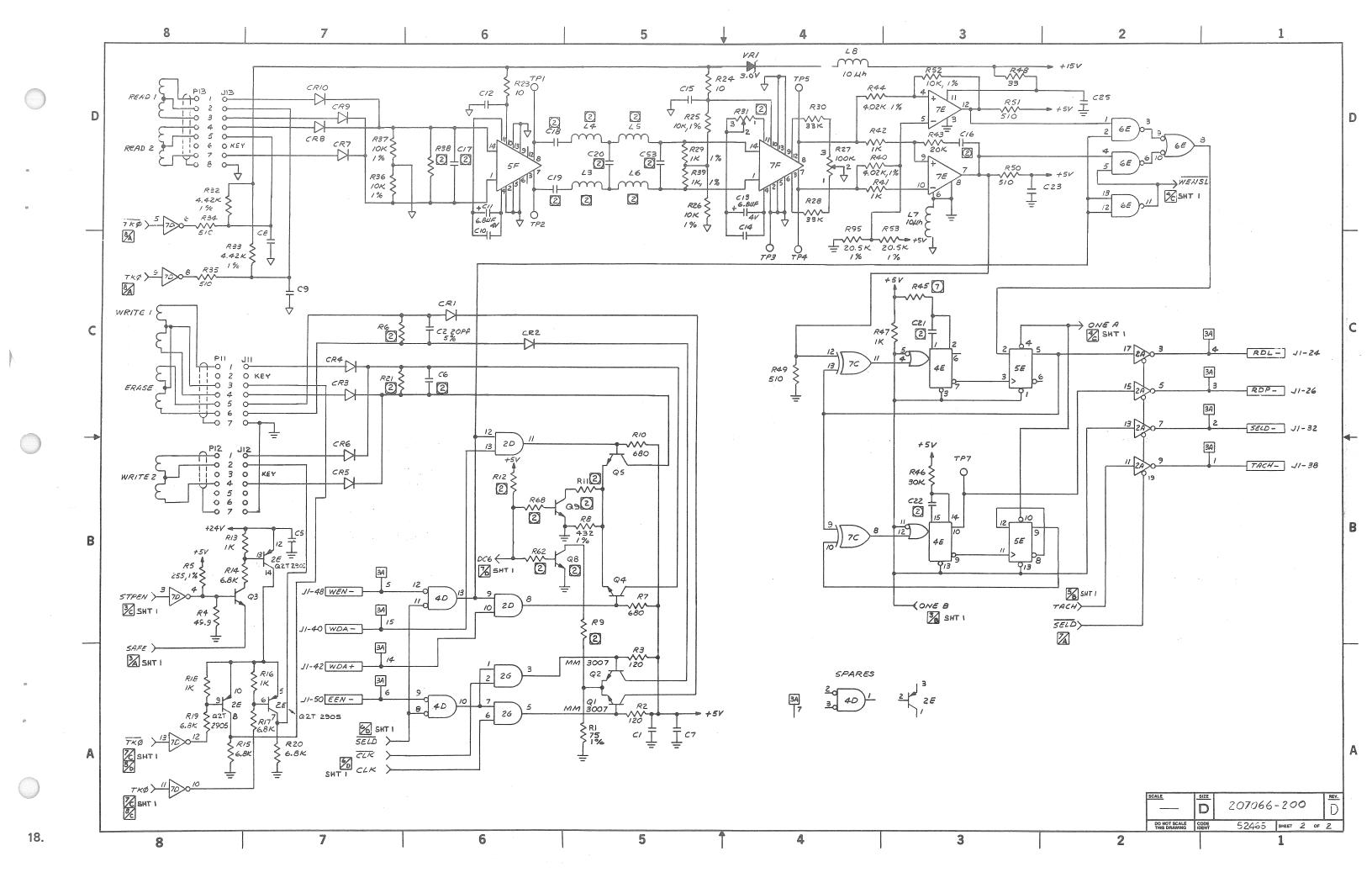


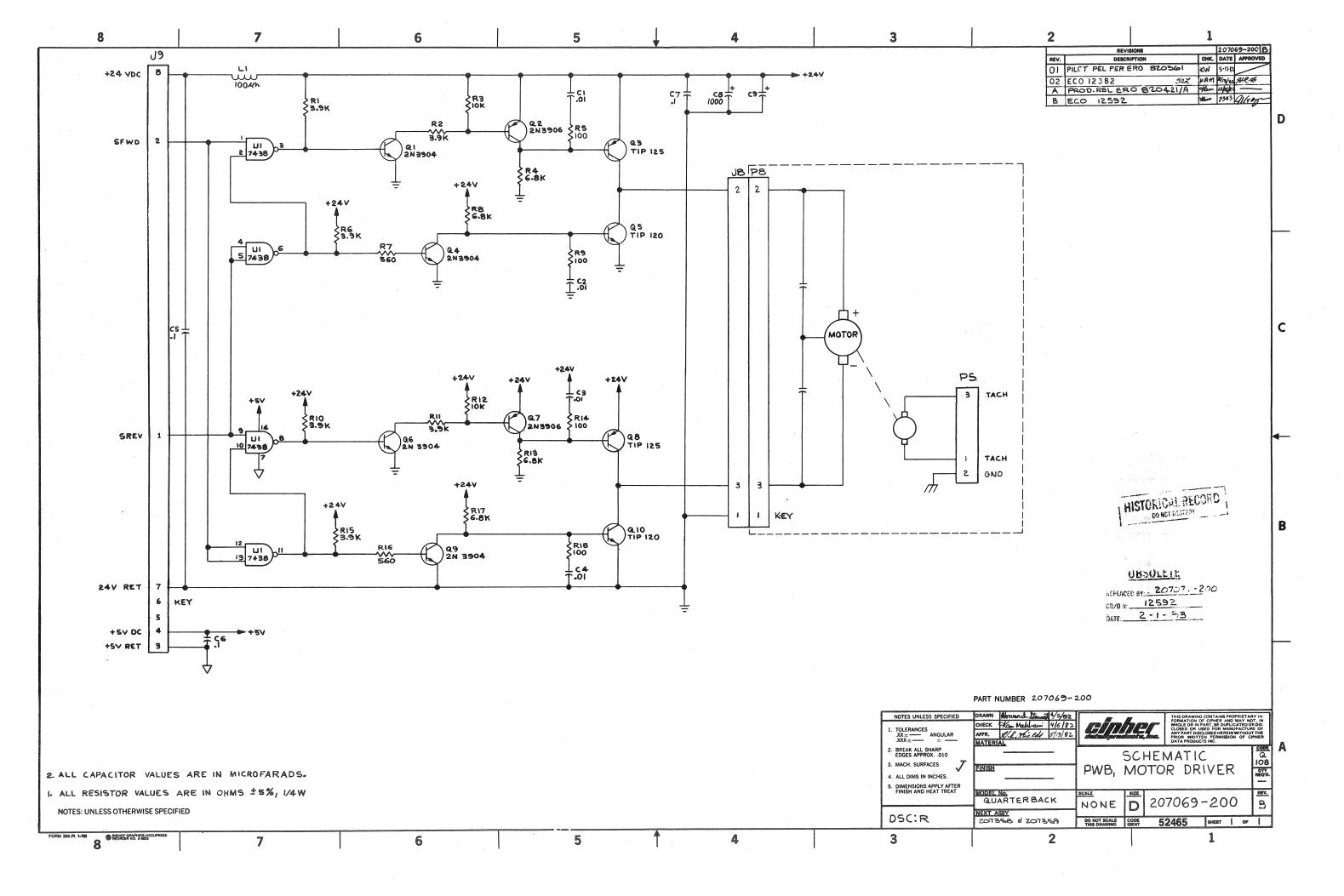




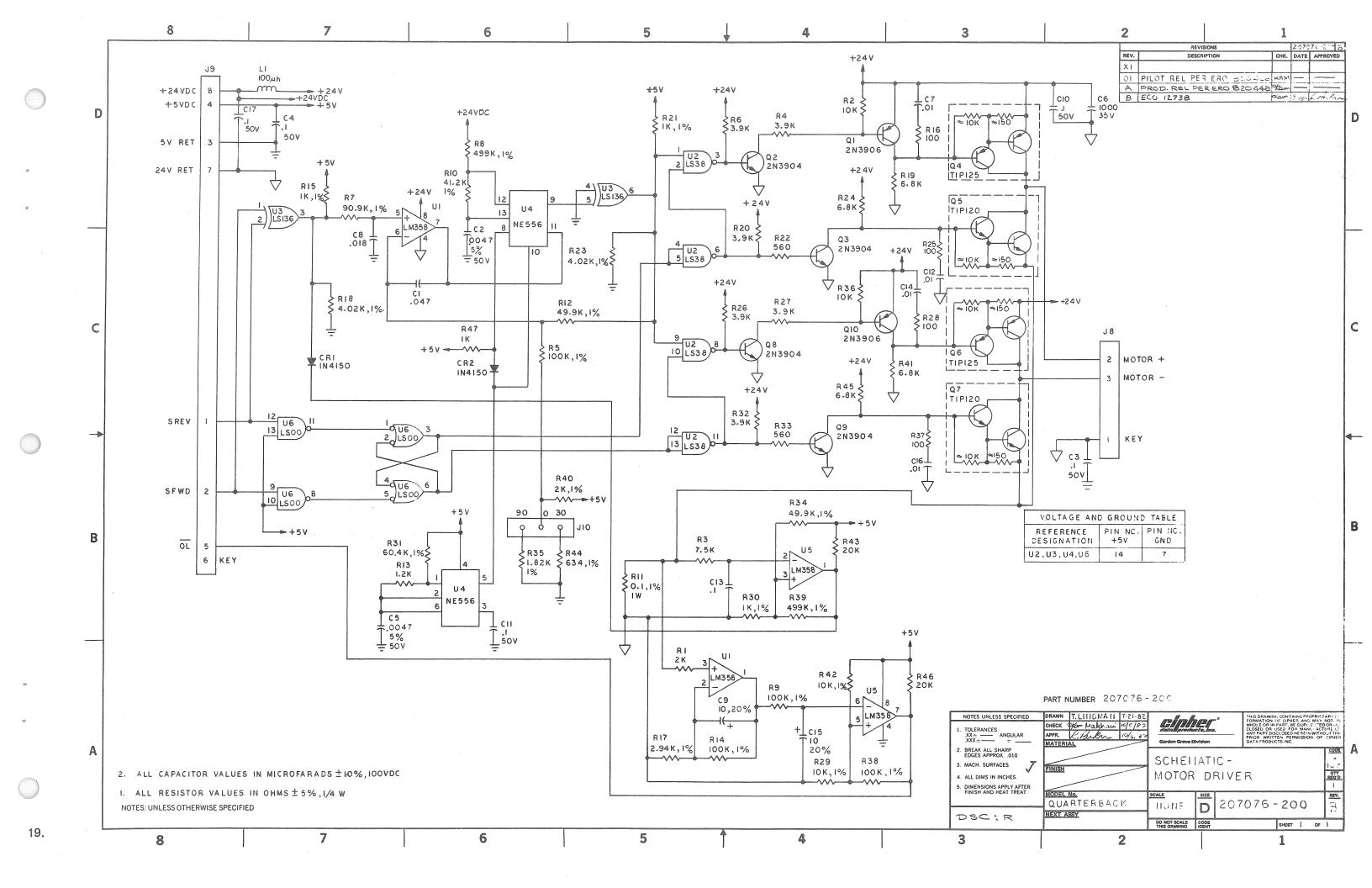
17.







18b.



SECTION 2

ASSEMBLY DRAWINGS

2.1 INTRODUCTION

This section contains the assembly drawings and material lists for all the assemblies in the Quarterback Tape Drive. These documents are listed in paragraph 2.2. Logic schematics are provided in Section I of this Engineering Drawing Package.

The assembly drawings identify every part on any given assembly. Parts are identified either by item number; (e.g., I, 2, 3, etc.) or by circuit reference number (e.g., RI, CI, UI, etc.). The associated material lists incorporate these identification numbers, together with part description, Cipher part number, and part quantity, i.e., the quantity of a particular part required for a given assembly.

2.2 ASSEMBLY DRAWINGS

The following assembly drawings are provided in numerical sequence, as listed. Included are related material lists.

	3
Assembly, Main PWB	 .207002-100
Assembly, Controller	 .207005-100
Assembly, Microcomputer Expander PWB	 .207011-100
Assembly, Motor Driver PWB	 .207017-100
Assembly, Main PWB	 .207066-100
Assembly, Motor Driver PWB	 .207069-100
Assembly, Diode/Slow Speed Motor Kit 30 lps	 .207072-100
Assembly, Cable-Motor Driver PWB	 .207073-100
Assembly, Motor Driver PWB	 .207076-100
Outline Drawing, Basic Cartridge Tape Drive	 .207302-001
Outline Drawing, Intelligent Cartridge Tape Drive	 .207303-001
Assembly, Main Frame	 .207304-100
Assembly, Drive Motor	 .207314-100
Assembly, Sensor	 .207324-100
Assembly, Sensor Harness	 .207326-100
Assembly, Carriage	 .207329-100
Pictorial, MTT F420	 .207350-100
Pictorial, MTT 0420	 .207358-100
Assembly, Main Frame	 .207393-100
Assembly, Ground Strap Cable	 .207394-100

2-1

Dwg. No.

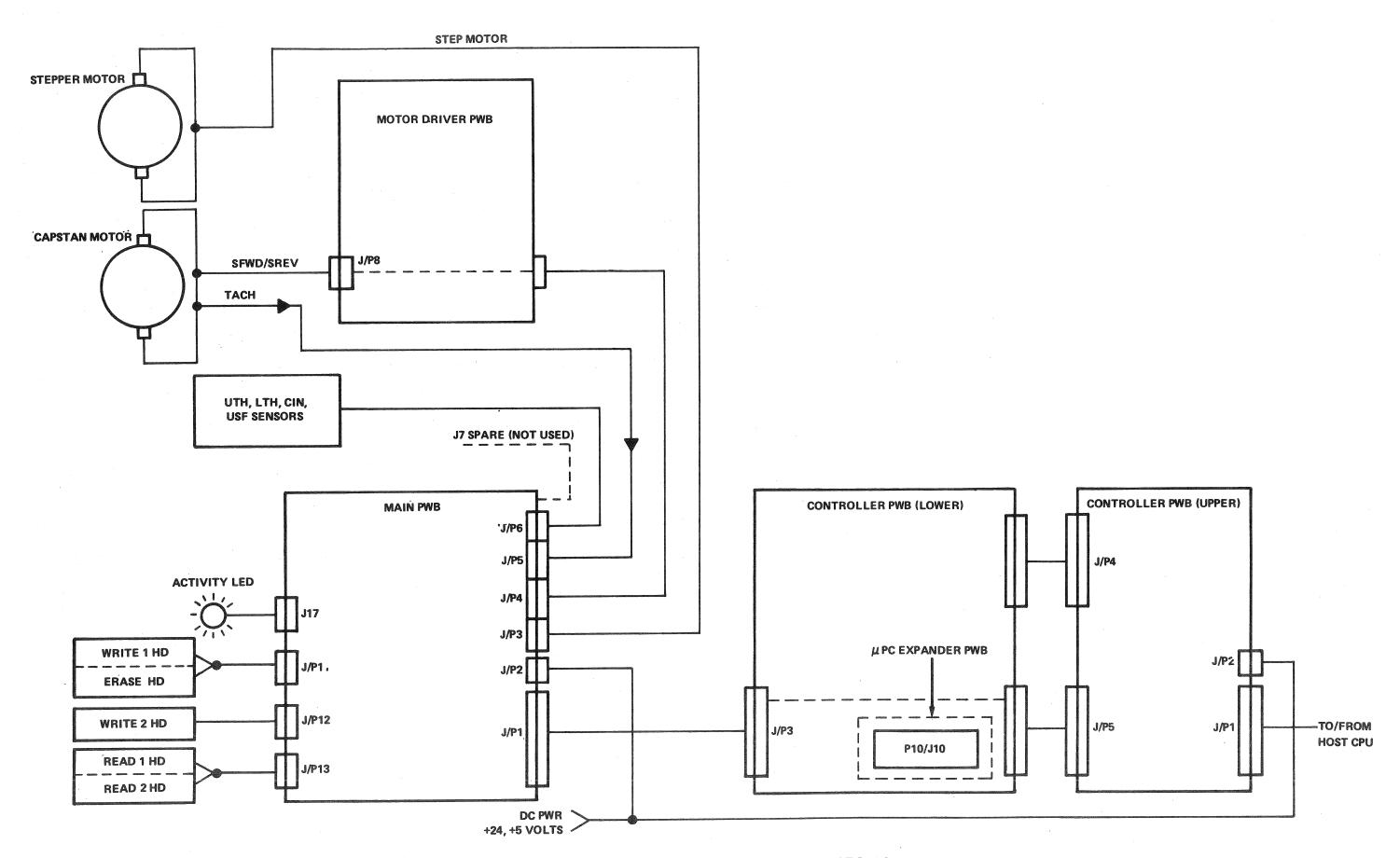
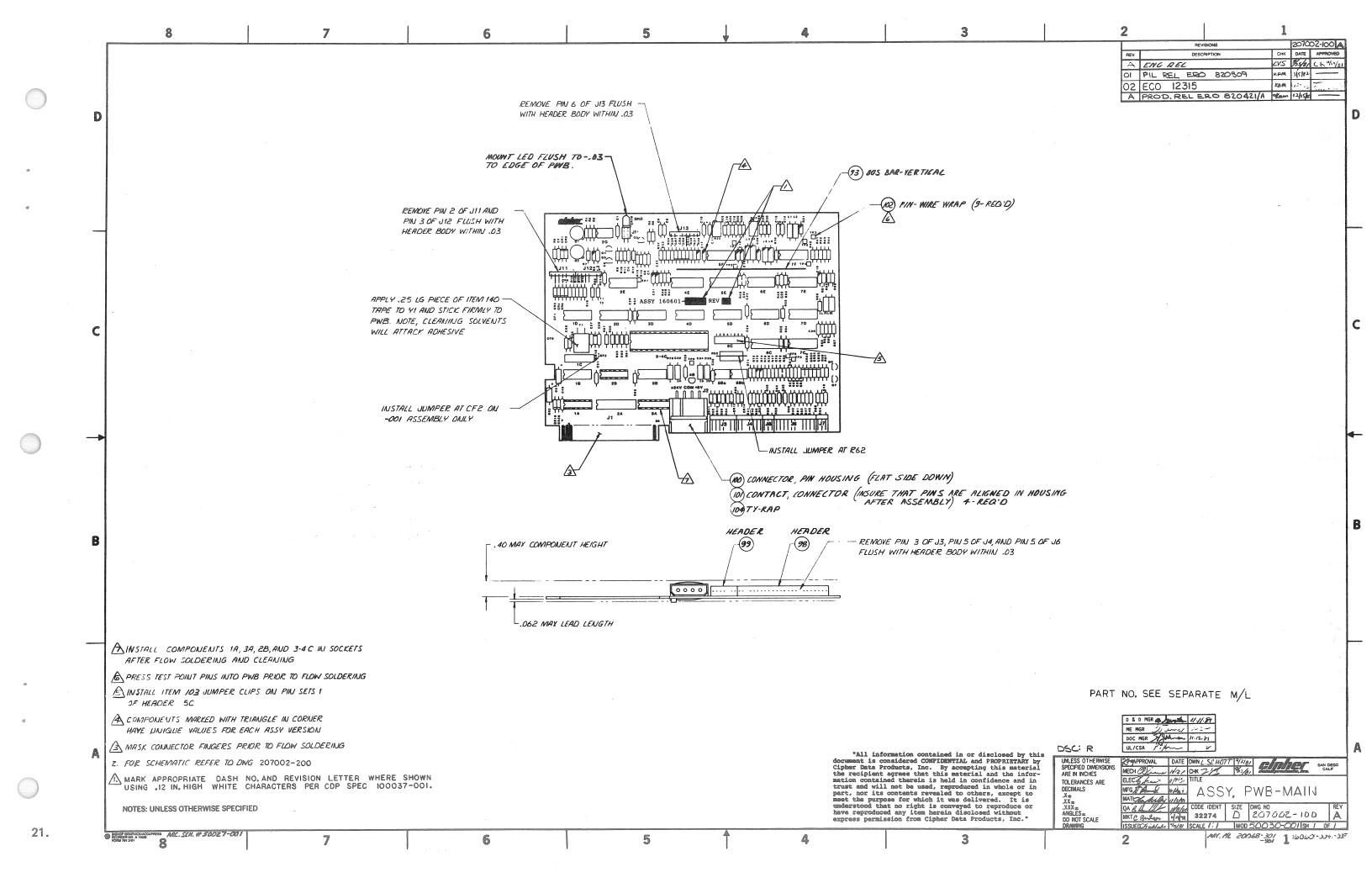


FIGURE 2-1. QUARTERBACK INTELLIGENT TAPE DRIVE, INTERCONNECT DIAGRAM



207002 — 001 B. ASSEMBLY PARTS LIST DSC:R 0 120 ASSY, PWB - MAIN - 30 IPS 207002 - 200 1 SCHEMATIC 207001 - 001 2 PROCESS BOARD 123234 - 001 3 I.C. 74S240 - 001 4 I.C. 74LS04 1B, 3B, 1D, 5D 125017 - 012 5 I.C. MA78L12 - 001 6 I.C. 75452 5Ba, 5Bb - 001 7 I.C. LM339 123038 - 001 8 I.C. 74LS86 123123 - 001 9 I.C. 74LS09 123030 - 001 10 I.C. 74LS02 123036 - 001 11 I.C. 74LS74 3D, 6D, 5E 100331 - 001 12 I.C. 7406 101139 - 001 | 13 | I.C. 75451 100234 - 001 14 I.C. 9602

)1	12	I.C.		7406					7D			1			_		_	_			i
)1	13	I.C.	7	5451					2G			1				\perp					
)1	14	I.C.	9	602		,			4E			1			L	L	\perp			V.	
Secret Secret	1-14-	82	04	12494	E.K. Far	Keniko	18-					DWG RE	L NO.	-	DA	TE		7			۱
		-82	03	12435	Which	1.9/21	82	_			1	820	287	2	1	11	8.2	2			ĺ
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			œ	12185	A 1 Km	emy 1	16.87	Α	82043/8	raligle >				7359				\perp	7	Ħ.	ľ
				PILREL			-[/	REL			MODELN						-		e is No	ŀ
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Á			ASSEMBLY PARTS LIST	S 7 0 1 1 M P	207002 -	
	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	QUANTITY WHOLE , DECIMAL 12	U.M. CODE
M P	123239 -	001 15	I.C. LM319	7E	1	
D P	101032 -	001 16	I.C. NE592	5F, 7F	2	
	207030 -	001 17	ASSY, PROM 8 BIT MICROCOMPUTER	3-4C	1	
M P	123029 —	001 18	I.C. 74LS00PCQR	6E	1	
	146014 —	014 19	SOCKET, DIP - 14 CONTACTS	2B, 1A	2	
M P	146014 -	040 20	SOCKET, DIP - 40 CONTACTS	3-4C	1	1
M P	146014 -	016 21	SOCKET, DIP - 16 CONTACTS	3A	1	
M P	120909 —	003 22	HEADER, PROGRAM-DIP	2B	1	1.1
M P	151032 —	001 23	TRANSISTOR PNP Q2T2905	2E	1	
M P	151030 —	001 24	TRANSISTOR NPN 2N3904	Q3-7	5	1
	151033 —	001 25	TRANSISTOR NPN MM3007	Q1,2	2	
	107201 —	001 26	DIODE 1N4150	CR1-14, CR18-25	22	
M	107005 -	001 27	LED, INDICATOR MV5054-2	CR16	.1	
	106500 —	014 28	CRYSTAL - 3.579545 MHz	Yl	1	1
	100064 -	121 29	RESISTOR, ½w ±5% 120	R70	1	
4	101156 —	472 30	RESISTOR, 1/2W ±5% 4.7K	57,59,60,79,81	5	1-1-
V.	101156 —	471 31	RESISTOR, 1/2w ±5% 470	56	1	
â	101156 -	681 32	RESISTOR, 1w +5% 680	R7,10, 58,61	4	
	101156 -	103 33	RESISTOR, 1 ±5% 10K	64,65,67,71,75,76,78, 86,88,92,93,96	12	
	101156 -	333 34	RESISTOR, 1/2W ±5% 33K	28,30	2	1.1.
1966			The state of the s		1 .	1 1

R63,66,72,77

	4	9/14/			ASSEMBLY PARTS LIST	S 7 0 1 1 M		7002 001	<u> </u>	1 Paleo
	10	PARTN	UMBER 28	ITEM NO.	DESCRIPTION	REMARKS	WHOLE	DECIMAL CODE		
	CY.	101156	- <u>161</u>	36	RESISTOR, w +5% 160	R90	1		\sqcup	
		101156	- 473	37	RESISTOR, 3w +5% 47K	R91,94	2	<u> </u>		
]		101156	- 122	38	RESISTOR, 12w +5% 1.2K	R80			11	_
1		101156	- 101	39	RESISTOR, w +5% 100	R82-85	4			
	700	101156	- 470	40	RESISTOR, 12w ±5% 47	R4	1			
1	1	101156	- 682	41	RESISTOR, 1/2w ±5% 6.8K	R14,15,17,19,20	5			
1	M P	101156	- 121	42	RESISTOR, 1/2W ±5% 120	R2,3	2			
1	M P	101156	- 511	43	RESISTOR, 1/2w ±5% 510	34,35,49,50,51	5			
		101156	- 303	44	RESISTOR, ½w ±5% 30K	R45,46	2	<u> </u>	\sqcup	
1	MP	101156	- 100	45	RESISTOR, ½w ±5% 10	R23	1			
1	MP	101156	- 221	46	RESISTOR, 1/2W ±5% 220	R54	1			
1	MP	101156	- 330	47	RESISTOR, 1/2w ±5% 33	R48	1			_
1	66 P	101156	- 102	48	RESISTOR, 1/2w +5% 1K	R13,16,18,38,41,42, 47,55,87,89	10			
1	10 F	101156	- 332	49	RESISTOR, ½w ±5% 3.3K	R73,74	2	<u> </u>	\sqcup	
1	C	101156	- 203	50	RESISTOR, 12w ±5% 20K	R43	1			-

R97

R98

R5

Rl

R32,33

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ACCEMBLY PARTS LIST

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	E, Ive.		ASSEMBLY PAKIS LIST	ASSEMBLY PARTS NUMBER						
PART NU	MBER	ITEM NO.	DESCRIPTION	REMARKS	WHOLE	ANTITY DECIMAL	U.M. CODE			
100155	- : 385	57	RESISTOR, 1/4w +1% 10K	R25,26,36,37,52	. 5					
100155	- 289	58	RESISTOR, 1/4w ±1% 1K	R29,39	2					
100155	- 254	59	RESISTOR, W +1% 432	R8,31	. 2				_	
	-	60				-			_	
100155	- 347	61	RESISTOR, W +1% 4.02K	R40,44	. 2	<u> </u>			_	
100155	- 415	62	RESISTOR, 1/2W ±1% 20.5K	R53,95	2	<u> </u>			_	
142027	- 003	63	TERMINATOR - 14 PIN 220/330 OHM	1A	1				_	
142032	_ 001	64	TERMINATOR - 16 PIN 220/330 OHM	3A	1					
138002	- 104	65	POTENTIOMETER 12w, 100K	R27	1	L				
102769	- 475	66	CAP., TANT. 35v +20% 4.7uf	C32	1					
102768	- 226	67	CAP., TANT. 10v +20% 22uf	C35,51,52	3	İ			_	
102768	- 225	68	CAP., TANT. 10v <u>+</u> 20% 2.2uf	C28,38	2	ļ	\sqcup			
102871	- 225	69	CAP., TANT. 20v +20% 2.2uf	C34	1	ļ			_	
102870	685	70	CAP., TANT. 4v ±20% 6.8uf	C11,13	2	<u> </u>				
102665	- 104	71	CAP., CER. 50v -20+80% .1 uf	C1,5,7-10,12,14,15, 23-27,29-31,33,36,	23	<u> </u>	L		_	
				C39-42						
102667	- 104	72	CAP., CER. 50v ±10%.1 uf	C44,45	2_	ļ			-	
102667	- 102	73	CAP., CER. 50v +10% .001 uf	C43,46-49	5	ļ				
102667	- 472	74	CAP., CER. 50v ±10% .0047uf	C37	1				_	
102666	_ 479	75	CAP., CER. 50v ±5% 4.7pf	C50	1					
	_	76								
7656 (R CS/60)						PAGE .	4_0	F		

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PART NUMBER
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101156 - 104 35 RESISTOR, 3w ±5% 100K

120916 - 001 96 HEADER, RIGHT ANGLE 120916 - 002 97 HEADER, RIGHT ANGLE

١,	PART N	MBER 20	NO.	DESCRIPTION	REMARKS	MHOLE	DECIMAL 18	CODE	
10 P		-	77						
			78						
			79						
M 6	102669	- 330	80	CAP., CER. 50v ±5% 33pf	C16	. 1			
	102669	- 302	81	CAP., CER. 50v ±5% 3000pf	C17	. 1			
	102669	- 911	82	CAP., CER. 50v ±5% 910pf	C18,19	. 2			
4 4	102669	- 221	83	CAP., CER. 50v ±5% 220pf	C20	1			_
11.	102669	- 101	84	CAP., CER. 50v ±5% 100pf	C22	1			
M P	102669	- 131	85	CAP., CER. 50v +5% 130pf	C21	. 1			
MP	102669	- 200	86	CAP., CER. 50v +5% 20pf	C2	1			
			87						
	122502	- 001	88	INDUCTOR, 10uh ±5%, 290ma	L7,8	. 2			
Ú.		_	89						
4	122502	- 004	90	INDUCTOR, 120uh <u>+</u> 5%, 124ma	L1,2	2			
	122502	- 007	91	INDUCTOR, 750uh <u>+</u> 5%, 79ma	L3,4	2			
	122502	- 005	92	INDUCTOR, 160uh <u>+</u> 5%, 111ma	L5,6	2			
Νž	102002	_ 001	93	BUS BAR - VERTICAL		1			
	100143	- 002	94	PAD, TRANSISTOR, TO-5	XQ1,2	2			
95	120905	- 011	95	HEADER, DOUBLE ROW, STRAIGHT	5c	1			\bot

J11,12

ASSEMBLY PARTS LIST

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,,	PART N	JMBEI	R 2
M.P	120915	_	024
7			

101156 - 152 51 RESISTOR, 1/4W ±5% 1.5K

101156 - 272 52 RESISTOR, 1/2 ±5% 2.7K

101156 - 392 53 RESISTOR, \(\frac{1}{2} \text{w} \(\frac{1}{2} \text{5} \text{ 3.9K} \)

100155 - 232 54 RESISTOR, w +1% 255

100155 - 181 | 55 RESISTOR, 1/4w +1% 75

100155 - 351 56 RESISTOR, w +1% 4.42K

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Γ,	PART N	UMBER 28	ITEM NO.	DESCRIPTION	REMARKS	QUANTITY WHOLE DECI	MAL CODE	
M F	120915	- 024	98	HEADER, RT. ANGLE	J4-7	1		
	120915	- 007	99	HEADER, RT. ANGLE	J3	1		
	105084	- 001	100	CONNECTOR-HOUSING, 4 POS.	J 2	1		
	106019	- 001	101	CONTACT-PIN	Ј2	4		
	100360	- 001	102	PIN, WIRE WRAP .025 SQ.	TP1-9	9		
	104903	- 001	103	CLIP, JUMPER .025 SQ. POST	5C	2		
	100171	- 002	104	TY-RAP 1/16-1%	J 2	1		
Y,	150107	- 001	105	TAPE, DOUBLE COATED POLYURETHANE FOAM	Yl		1	
11	164021	- 926	106	WIRE, HOOKUP 26 AWG	CF2, R22, R62		2	
M P								
Ů.	100121	_ 001	108	DIODE, ZENER (1N5221)2.4V±10%	VR1	1		
	207002	- 100	110	ASSY DWG		0		
	207000	001	111	PRINTED MASTER		0		
	100155	- 437	113	RESISTOR, 1/4W ±1% 34.8K	R45	1		
		_						
		_	L.,					
		_						
<u> </u>		_						
2					-			
		_				1 i		

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DSC:R | DOC CODE | Q 120 ASSY, PWB - MAIN - 90 IPS

2 1 1 1 1	207002 - 200 207001 - 001 123234 - 001 123031 - 001 125017 - 012	1 2 3	SCHEMATIC PROCESS BOARD I.C. 74S240 I.C. 74LS04	2A	0 1	CODE
1 1 1 1	123234 — 001 123031 — 001	3	I.C. 74S240	2A	 	$\perp \perp \perp$
1 1 1	123031 - 001			2A	1	TTT
1 1 1		4	T C 741.504			
1	125017 — 012		T.O. (-400%	1B, 3B, 1D, 5D	4	
		5	I.C. MA78L12	4B	1.	
<u> </u>	101031 - 001	6	I.C. 75452	5Ba, 5Bb	2	
1	125011 — 001	7	I.C. LM339	6C	1	
	123038 — 001	. 8	I.C. 74LS86	7C	1	
1	123123 - 001	9	I.C. 74LS09	2D	1	
1	123030 — 001	10	I.C. 74LS02	4D	1	
1	123036 — 001	11	I.C. 74LS74	3D, 6D, 5E	3	
1	100331 - 001	1.2	I.C. 7406	7D	1	
1	101139 — 001	13	I.C. 75451	2G	1	
1	100234 - 001	14	I.C. 9602	4E	1	
REPARED	Sue Redmond	I-14-	82 04 12494 R. Kally 11/10/81		DWG REL NO.	DATE
HECKED			82 03 12435 24 Acids 9/2/82			2 1 8 2
DESIGN NGINEER	4/21/2	1-29	-82 02, 12315 Sillerand both B 1	2636 & L. Hall 2 2/88	NEXT ASSEMBLY	MIDDIY
	1		02 12185 At Mussint 2/20/5 A		207358	3
	1 1		OI PIL RELL	EL	MODEL NO.	

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10	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	QUANTITY WHOLE DECIMAL 12 18	U.M. CODE	I
14 P	100155 - 385	57	RESISTOR, W +1% 10K	R25,26,36,37,52	5		\perp
10 P	100155 - 289	58	RESISTOR, ¼w ±1% 1K	R29,39	2		\perp
10 F	100155 - 254	59	RESISTOR, 1/4 ±1% 432	R8	1		\downarrow
M P	100155 - 302	60	RESISTOR, 1/4W ±1% 1.37K	R31	1		1
M.F	100155 — 347	61	RESISTOR, w ±1% 4.02K	R40,44	2		_
M P	100155 - 415	62	RESISTOR, w +1% 20.5K	R53,95	2		_
M P	142027 - 003	63	TERMINATOR - 14 PIN 220/330 OHM	1A	1		1
MP	142032 - 001	64	TERMINATOR - 16 PIN 220/330 OHM	3A	1		\downarrow
MP	138002 - 104	65	POTENTIOMETER 1/2W, 100K	R27	1		\perp
M P	102769 - 475	66	CAP., TANT. 35v <u>+</u> 20% 4.7uf	C32	1		\perp
M P	102768 - 226	67	CAP., TANT. 10v <u>+</u> 20% 22uf	C35,51,52	3	<u> </u>	1
NA P	102768 - 225	68	CAP., TANT. 10v ±20% 2.2uf	C28,38	. 2		\perp
M P	102871 - 225	69	CAP., TANT. 20v <u>+</u> 20% 2.2uf	C34	1		_
10 6	102870 - 685	70	CAP., TANT. 4v ±20% 6.8uf	C11,13	2		_
	102665 - 104	71	CAP., CER. 50v -20+80%.1 uf	C1,5,7-10,12,14,15, 23-27,29-31,33,36,	23		1
				C39-42			\perp
744	102667 - 104	72	CAP., CER. 50v ±10% .1 uf	C44,45	2		\perp
	102667 - 102	73	CAP., CER. 50v ±10% .001 uf	C43,46-49	5		\perp
7	102667 - 472	74	CAP., CER. 50v +10% .0047uf	C37	1		\perp
	102666 - 479	75	CAP., CER. 50v ±5% 4.7pf	C50	1		\perp
	102669 - 331	76	CAP., CER. 50v +5% 330pf	C17	1	<u> </u>	

ASSEMBLY PARTS LIST

S 7 0 1 1 M P 207002 — 002 ASSEMBLY PARTS NUMBER

19	PART NU	MBER 21	ITEM NO.	DESCRIPTION	REMARKS	WHOLE 12	DECIMAL 18	U.M. CODE		Ц
MP	123239	- 001	15	I.C. LM319	7E	1				Ц
	101032	- 001	16	I.C. NE592	5F,7F	2				Ц
at P	207030	- 001	17	ASSY, PROM - 8 BIT MICROCOMPUTER	3-4C	1				Ц
M P	123029	- 001	18	I.C. 74L800:	6E	1				Ц
0.1	146014	- 014	19	SOCKET, DIP - 14 CONTACTS	2B, 1A	2				Ц
	146014	- 040	20	SOCKET, DIP - 40 CONTACTS	3-4C	• 1				Ц
00	146014	- 016	21	SOCKET, DIP - 16 CONTACTS	3A	1				Ц
N P	120909	- 003	22	HEADER, PROGRAM-DIP	2B	. 1				Ц
(a) (t)	151032	- 001	23	TRANSISTOR, PNP Q2T2905	2E	1				Ц
мР	151030	- 001	24	TRANSISTOR, NPN 2N3904	Q3-7	. 5			-	Ц
M	151033	- 001	25	TRANSISTOR, NPN MM3007	Q1,2	. 2				Ц
	107201	- 001	26	DIODE 1N4150	CR1-14,CR18-25	22				Ц
Will	107005	- 001	27	LED, INDICATOR MV5054-2	CR16	1				Ц
	106500	- 014	28	CRYSTAL - 3.579545 MHz	Yl	1				Ц
	100064	- 121	29	RESISTOR, ½w ±5% 120	R70	1				
	101156	- 472	30	RESISTOR, 1/2w ±5% 4.7K	57,59,60,79,81	5				Ш
19	101156	- 471	31	RESISTOR, 1/2 ±5% 470	56	1				Ц
	101156	- 681	32	RESISTOR, 1/2W ±5% 680	R7,10,58,61	4				Ш
64 P	101156	- 103	33	RESISTOR, 1/2W ±5% 10K	64,65,67,71,75,76,78, 86,88,92,93,96	. 12				
	101156	- 333	34	RESISTOR, ½w ±5% 33K	28,30	2				
MP	101156	- 104	::35	RESISTOR, 1/w ±5% 100K	R63,66,72,77	4		<u> </u>		Ш
FORM 798	(R 09/80)						PAGE	2	OF 7	

ASSEMBLY PARTS LIST

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19	PARTN	MBER 20	ITEM NO.	DESCRIPTION	REMARKS	WHOLE I	NTITY DECIMAL 18	U.M. CODE	
MP	102669	- 301	77	CAP., CER. 50v +5% 300pf	C18,19	. 2			
MP	102669	- 750	78	CAP., CER. 50v <u>+</u> 5% 75pf	C20	1			
M P M P	102669	- 330	79	CAP., CER. 50v ±5% 33pf	C16,21,22	. 3			
MP			80						
MP	_ 8		81			1			
M P			82						
MP			83	<u>a</u>					
M P M P M P M P M P M P M P M P M P M P			84			1557			
МР		_	85						
мР	102669	- 200	86	CAP., CER. 50v ±5% 20pf	C2	1			
M P	122502	- 003	87	INDUCTOR 56uh <u>+</u> 5%, 164ma	L5,6	2			
18 P	122502	- 001	88	INDUCTOR 10uh <u>+</u> 5%, 290ma	L7,8	2			
M P	122502	- 006	89	INDUCTOR 240uh <u>+</u> 5%, 101ma	L3,4	2			
M P	122502	- 004	90	INDUCTOR 120uh <u>+</u> 5%, 124ma	L1,2	2			\perp
			91						
			92						
A.	102002	- 001	93	BUS BAR - VERTICAL		1			
	100143	- 002	94	PAD, TRANSISTOR, TO-5	Q1,2	2			
C).	120905	- 011	95	HEADER, DOUBLE ROW, STRAIGHT	5C	1			
	120916	- 001	96	HEADER, RIGHT ANGLE	J13	1			
	120916	- 002	97	HEADER, RIGHT ANGLE	J11,12	1			

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ASSEMBLY PARTS LIST

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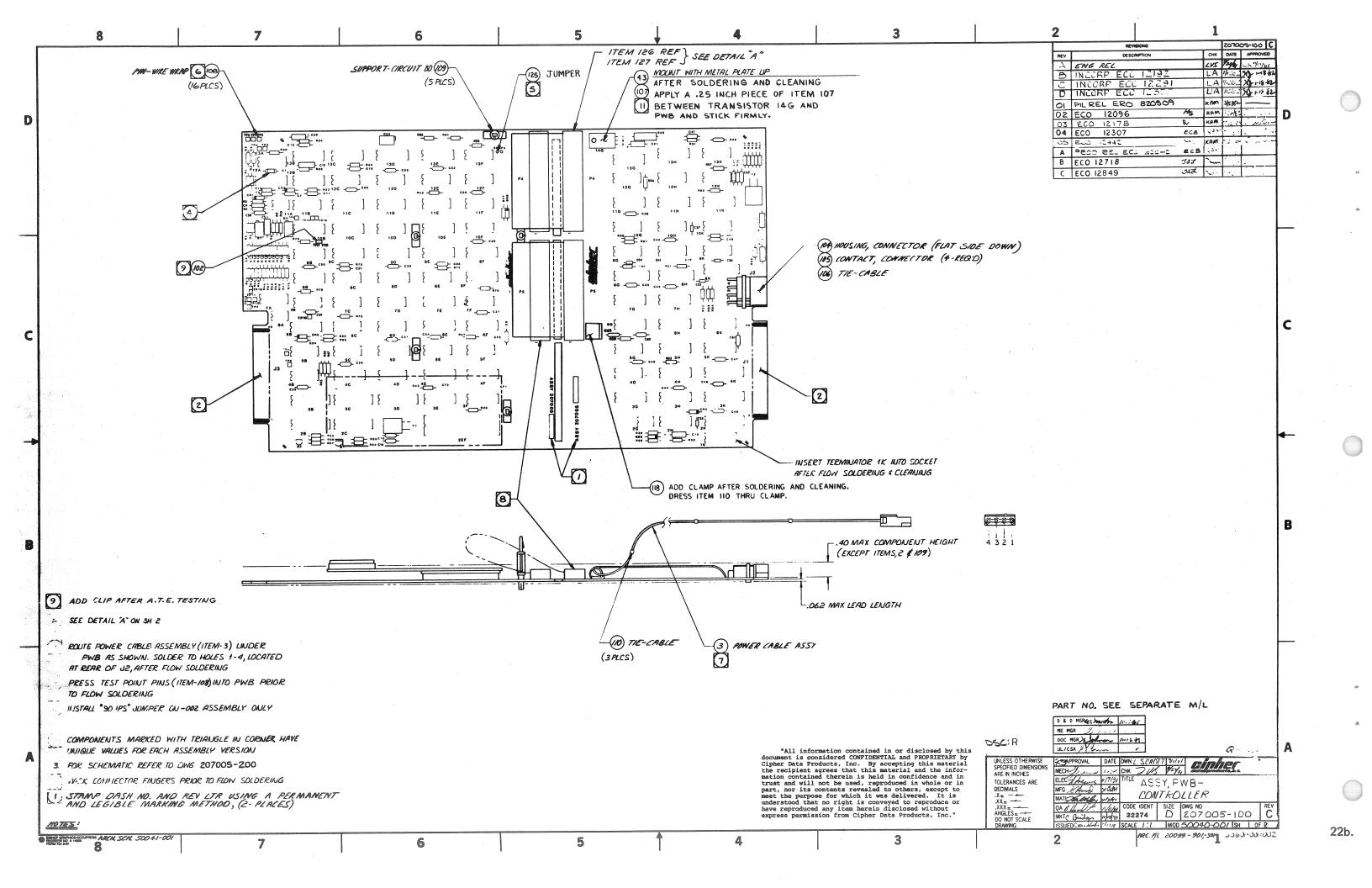
15	PART N	JMBER 28	ITEM NO.		DESCRIPTION	REMARKS	WHOLE 1	DECIMAL 18	CODE		
	101156	- 161	36	RESISTOR, %	w <u>+</u> 5% 160	R90	1			_	4
	101156	- 473	3,7	RESISTOR, &	w <u>+</u> 5% 47K	R91,94	2			_	_
	101156	- 122	38	RESISTOR, 4	w <u>+</u> 5% 1.2K	R80	1				4
	101156	- 101	39	RESISTOR, &	w <u>+</u> 5% 100	R82-85	4.				4
۲.	101156	- 470	40	RESISTOR, &	w <u>+</u> 5% 47	R4	1				
	101156	- 682	41	RESISTOR, &	w <u>+</u> 5% 6.8K	R14,15,17,19,20	. 5				_
	101156	- 121	42	RESISTOR, &	w <u>+</u> 5% 120	R2,3					1
	101156	- 511	43	RESISTOR, &	w <u>+</u> 5% 510	34,35,49,50,51	5				_
	101156	- 303	44	RESISTOR, &	w <u>+</u> 5% 30K	R45,46	2				
	101156	- 100	45	RESISTOR, &	w <u>+</u> 5% 10	R23	3				_
1	101156	- 221	46	RESISTOR, %	w <u>+</u> 5% 220	R54	1				_
	101156	- 330	47	RESISTOR, &	w <u>+</u> 5% 33	R48	1				
	101156	- 102	48	RESISTOR, %	w <u>+</u> 5% lK	R13,16,18,41,42,47, 55,73,74,87,89	11				
	101156	- 302	49	RESISTOR, &	w <u>+</u> 5% 3K	R38	1				
	101156	- 203	50	RESISTOR, %	w <u>+</u> 5% 20K	R43	1				Ц
	101156	- 152	51	RESISTOR, %	w <u>+</u> 5% 1.5K	R69	1				
	101156	- 272	52	RESISTOR, %	w <u>+</u> 5% 2.7K	R97	1				Ш
2	101156	- 392	53	RESISTOR, &	w <u>+</u> 5% 3.9K	R98	1				
	100155	- 232	54	RESISTOR, 3	w <u>+</u> 1% 255	R5	1				Ц
	100155	- 181	55	RESISTOR, ½	w <u>+</u> 1% 75	Rl	1				Ц
1	100155	- 351	56	RESISTOR, I	w <u>+</u> 1% 4.42K	R32,33	2				
RM 7	95B (R 09/80)				** ·			PAGE _	3_ c)F	_

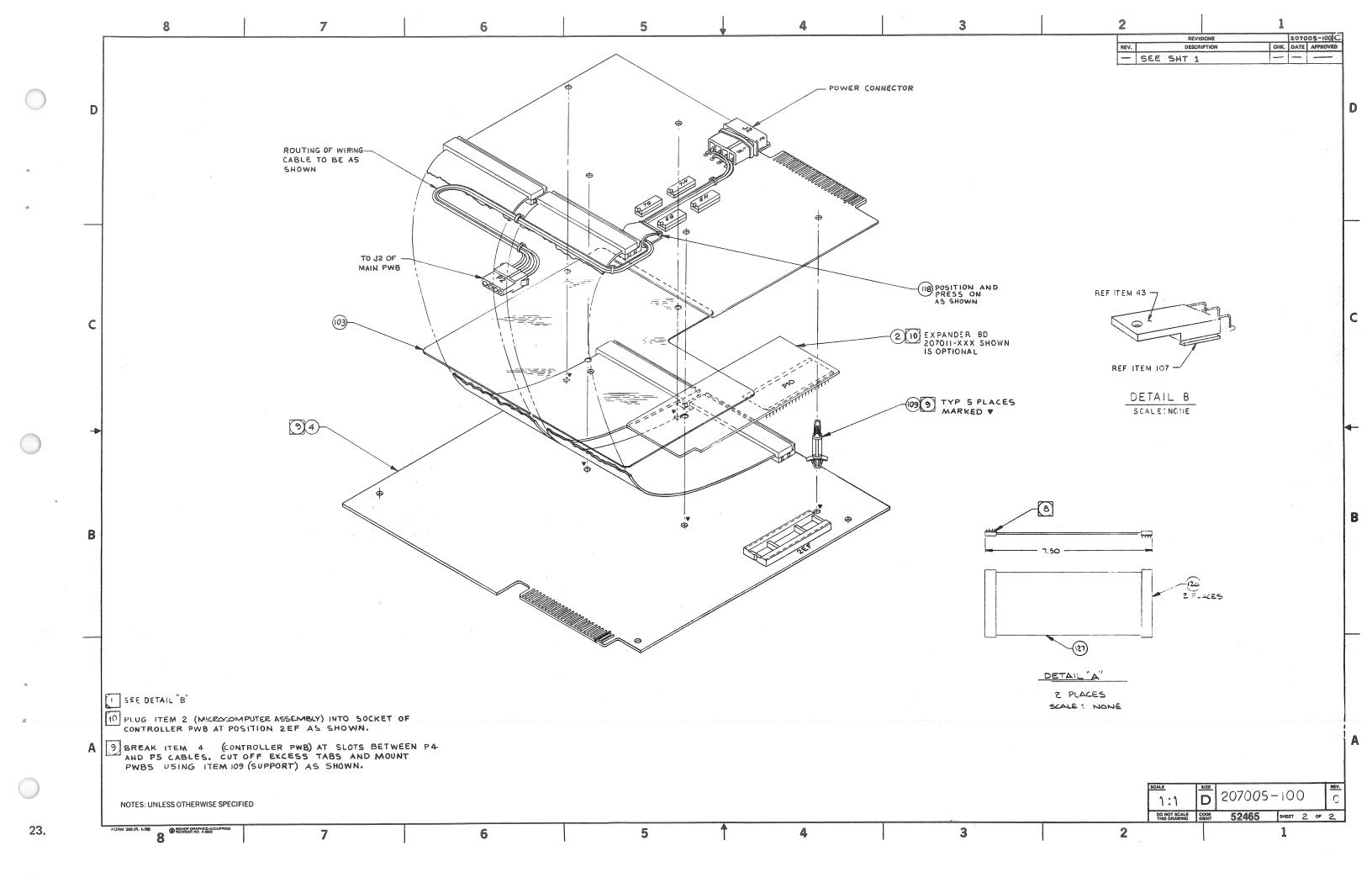
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ASSEMBLY PARTS LIST

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atte	tali produ	ata, ka.		(CONTINUATION)		ASSEMBLY PARTS NO	DMBER			
10	PART N	JMBER 28	ITEM NO.	DESCRIPTION	REMARKS	QUANTI) WHOLE Dec	CHAAL C	U.M. ODE		1000
M P	120915	- 024	98	HEADER, RIGHT ANGLE	J4-7			-	_	_
M P	120915	- 007	99	HEADER, RIGHT ANGLE	J3			-	\dashv	_
14 P	105084	- 001	100	CONNECTOR-HOUSING, 4 PIN	J2	1				_
M P	106019	- 001	101	CONTACT, PIN	J2	4			_	_
M P	100360	- 001	102	PIN, WIRE WRAP, .025 SQ.	TP1-9	9			\dashv	_
M P	104903	- 001	103	CLIP, JUMPER, .025 SQ. POST	5C	2			- 1	
MP	100171	- 002	104	TY-RAP 1/16-11/4	J2	1			_	_
MP	150107	- 001	105	TAPE, DOUBLE COATED POLYURETHANE FOAM	Y1.		1	\dashv		_
M P		-	106					_	_	_
M P	164021	- 926	107	WIRE, HOOKUP 26 AWG	R22,62		1	_		
MP	100121	- 001	108	DIODE, ZENER (1N5221)2.4V±10%	VR1					_
MP								-	\dashv	Ŀ
MP	207002	- 100	110	ASSY, DWG		0		_	_	L
M P	207000	- 001	111	PRINTED MASTER		0				L
11/1	100155	- ₄₃₇	113	RESISTOR, 1/4W ±1% 34.8K	R45	1			ليسا	L
4.9		-								L
			l							L
									2.0	L
										L
		_			*					
			I			i_				
FORM 7	58 (R 09/80)						PAGE	6 6	oF	





Continue States
ASSEMBLY TITLE:
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ASSEMBLY PARTS LIST

19	PART NUMBER	NO.	DESCRIPTION	REMARK\$	WHOLE DEC	IMAL CODE
	207005 - 200	1	SCHEMATIC		Q	
	207041-001	2	ASSY, 8-BIT MICROCOMPUTER	2 EF(207011-001 OPTIONAL)	1	
	207021 - 001	3	ASSY, POWER CABLE - CONTROL		1	
	207004 001	4	PROCESS BOARD		1	
	123029_001	5	I.C. 74LS00	7B, 11D	2	
	123149_001	6	I.C. 74LS01	13F	1	
	123031 _ 001	7	I.C. 74LS04	10D, 12E, 12K	3	
	123032_001	8	I.C. 74LS08	5C, 5@	2	
	123034 - 001	9	I.C. 74LS11	10F	1	
	123047 - 001	10	I.C. 74LS14	5B	1	
	123035 _ 001	11	I.C. 74LS32	5F, 11F	2	
	123093 - 001	12	I.C. 74LS51	7A	1	
	123084 _ 001	13	I.C. 74LS109	13E	1	
	123100 _ 001	14	I.C. 74LS138	11C, 5D, 10E	3	
EPARED	SUE REDMOND	DAYE 01-14	1-82 M 12849 K. Karken 1983		DWG REL NO.	DATE
BY	GIL PEREZ	01-26	5-82 L 12771/AS R. Harles		820287	02 01
ESIGN GINEER	GIL PEREZ	01-29	1-82 K 12741 Reken 2/12/83		NEXT ASSEMBL	A WID DI

#			ASSEMBLY PARTS LIST	ASSI	EMBLY PARTS NUMBER	- 001	14
19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	QUANTITY WHOLE , DECIMAL 12 18	U.M. CODE	
M P	106500 - 115	57	CRYSTAL 6.00 MHz	Yl	1		
88 P	101156 - 105	58	RESISTOR, 18w ±5% 1.0M	R59	1		
	101156 - 302	59	RESISTOR, 10 ±5% 3K	R2,8	2		
	101156 - 750	60	RESISTOR, 1/2w ±5% 75	R20,42	2		
10.7	101156 - 392	61	RESISTOR, 10 ±5% 3.9K	R87	1		
	101156 - 511	62	RESISTOR, W +5% 510	R3,5,19,35	4		\perp
W P	101156 - 102	63	RESISTOR, 1/2W ±5% 1K	R1,28,29,31-34,36- 41,47,51,52,55,60-62,	29		
DA #	_			64-66,R73-77,79			
M P	101156 -472	64	RESISTOR, 1 ±5% 4.7K	R26,27,43,45,46,56, 57,86	8		
M P	101156 -512	65	RESISTOR, 1 +5% 5.1K	R23,44	2		
MP	101156 - 103	66		R24,78	2		\perp
18 P	101156 - 362	67	RESISTOR, 1 +5% 3.6K	R6, 80-82	4		
M P	101156 - 333	68	RESISTOR, 12w ±5% 33K	R13,14	2		
(d P	101156 -473	69	RESISTOR, 12w ±5% 47K	R22,58	2		
	101156 - 244	70	RESISTOR, 1 ±5% 240K	R30	1		
	100155 - 164	71	RESISTOR, 1/2w ±1% 49.9	R53	1		
	101156 - 203	72	RESISTOR, 1/2 ±5% 20K	R72	1		\perp
14 P	101156 - 562	73	RESISTOR, 1/w ±5% 5.6K	R4	1		
新伊	101156 - 154	74	RESISTOR, 1/2W ±5% 150K	R12	1		
	100155 - 232	75	RESISTOR, 1/2W +1% 255	R54	1		
14.0	100155 -414	76	RESISTOR, 1/4w +1% 20K	R9,10,15,16,21,50, 68,70	8		$oxed{oxed}$

ASSEMBLY PARTS LIST

S 7 0 1 1 M.P. 207005 - 601 N

19	PART NL	MBER 20	ITEM NO.	DESCRIPTION	REMARKS	WHOLE 12	DECIMAL 18	U.M. CODE	
	123085	- 001	15	I.C. 74LS139	11G	1			
	123095	- 001	16	I.C. 74LS153	3E, 4E, 3F, 4F	4			
	123231	- 001	17	I.C. CD4502B	9B, 9C	2			_
	123090	- 001	18	I.C. 74 LS163	9D, 13D	. 2			_
	123086	- 001	19	I.C. 74 LS164	4D, 5E, 13K	. 3			L
	123232	- 001	20	I.C. 74LS166	4C, 7E, 13G, 2H	4			_
	123096	- 001	21	I.C. 74 LS174	10C, 9E, 11H	. 3			L
	123045	- 001	22	I.C. 74 LS175	4H, 5H, 5K	3			L
	123233	- 001	23	I.C. 74LS195	3G, 3H	2			L
	123097	- 001	24	I.C. 74LS367	6G, 7G, 6H, 7H, 6K	5			L
	123091	_ 001	25	I.C. 74LS374	3C	1			L
	123203	- 001	26	I.C. 74LS393	9G, 10G, 9H, 10K, 9K	. 5			L
	123234	- 001	27	I.C. 74S240	2B, 3B, 3K, 4K	4			L
	100234	- 001	28	I.C. 9602	12B, 13B	2	<u> </u>		L
	123245	- 001	29	I.C. 9401	13A, 11E	2			L
	100345	- 001	30	I.C. MC4044P	8E	1		L.	L
	123069	- 001	31	I.C. 74S124	12A	1			L
	123235	- 001	32	I.C. MC14040	13C, 6F, 8F	3			L
	207029	- 001	33	ASSY, PROM 512 X 4 (READ SEQUENCER)	10B	1			L
	207026	- 001	34	ASSY, PROM 256 X 4 (WRITE SEQUENCER	9F	1			L
	207024	- 001	35	ASSY, PROM 32 X 8 (READ DECODER)	6E	1			

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ASSEMBLY PARTS LIST

| S 7 0 1 1 M P | 207005 - 001 N N | SSEMBLY PARTS NUMBER | SEMBLY PARTS NUMBER NUMBER | SEMBLY PARTS NUMBER NUM

490		Mar of second		(CONTINUATION)							
19	PART N	JMBER 28	ITEM NO.	DESCRIPTION	REMARKS	WHOLE 12	ANTITY DECIMAL 18	U.M. CODE			
MP	100155	- 385	77	RESISTOR, 1/4w +1% 10K	R18,49,69,71	4					
M P	100155	- 443	78	RESISTOR, 1/4w +1% 40.2K	R17,67	2				_	
M P	101156	- 271	79	RESISTOR, W + 5% 270 OHMS	R63	1				_	
MP	100067	- 101	80	RESISTOR, 1w <u>+</u> 5% 100	RESISTOR, 1w ±5% 100 R48						
M.P	138002	503	81	POTENTIOMETER 1/2w, 50K	Rll	1				_	
MP	138002	- 103	82	POTENTIOMETER 17w, 10K	R25,R7	2	i 			Ļ	
MP	-1-20002-	502	-83	200221 (METER 1/2) 1X			<u> </u>			L	
M P	142032	- 002	84	TERMINATOR, 16 PIN, 180/390 OHM	1K	1				_	
M P	102768	- 225	85	CAP., TANT. 10v +20% 2.2uf	C15	1				L	
мР	102768	- 475	86	CAP., TANT. 10v ±20% 4.7uf	C20	1				L	
MP	102768	_ 226	87	CAP., TANT. 10v ±20% 22uf	C16	1	<u> </u>		-	_	
M P	102769	- 475	88	CAP., TANT. 35v +20% 4.7uf	C17,21	2	1			_	
M P	102668	- 472	89	CAP., CER. 50v ±5% 4700pf NPO	C4	1	<u> </u>			L	
MP	102665	- 104	90	CAP., CER. 50v -20+80% 0.10uf.Z5U	C2,3,6,7,8,24-50	32	<u> </u>	igsquare		L	
мР	102669	- 301	91	CAP., CER. 100v ±5% 300pf NPO	C9,10,60,61,63	5	i .			L	
M P	102667	- 563	92	CAP., CER. 100v +10% .056uf X7R	C5	1	ļ	<u> </u>		L	
M.P	102669	- 150	93	CAP., CER. 100v ±5% 15pf NPO	C14	1	-			L	
M P	102669	- 330	94	CAP., CER. 100v +5% 33pf NPO	Cl	1				L	
M P	102669	- 911	95	CAP., CER. 100v +5% 910pf NPO	C13	1	<u> </u>			L	
14 P	102668	-122	96	CAP., CER. 50v ±5% 1200pf NPO	C19	1	-			Ŀ	
M P	102668	-822	97	CAP., CER. 50v ±5% 8200pf NPO	C12	1					
	T05008	-822	31	CAr., CBR. 50V 15% CEUTPE				5	buent	7	

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ASSEMBLY PARTS LIST

S 7 0 1 1 M P 207005 — 001 N.

19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	QUANTITY WHOLE DECIMAL 12	U.M. CODE	
ľ	123238 - 001	36	I.C. MM5257N-25	8G, 8H, 8K	3		
7.7	125040 - 001	37	I.C. TL082P	11A	1	1_1	_
	101022 - 001	38	I.C. LM311	2G	1	\perp	
1	123036 - 001	39	I.C. 74LS74	11B, 6C, 12D, 12F, 12G, 12H	6		
100	100336 - 001	40	I.C. 7438	4B	1		
_t	207027 - 001	41	(HOST ASSY, PROM 256 X 4 SEQUENCER)	11K	1		
	207025 - 001	42	ASSY, PROM 32 X 8 (WRITE ENCODER)	13н	1	1	
1	125006 - 005	43	I.C. UA7805UC	14G	1		
	123237 - 001	44	I.C. 74LS373	3D	1		
N P	123023 - 001		I.C. 74874	7D, 6D, 7F	3		
X.	123028 - 001	46	I.C. 74S00	8C	1		
	123046 - 001	47	I.C. 74S04	7C	1		
1	101031 -001	48	I.C. 75452	6A	1	1	
	123119 -001	49	I.C. 74s163	8D	1		
1	123120 -001	50	I.C. 74S174	8B	1	<u> </u>	
1	123152 - 001	51	I.C. 74LS273	2C	1	_	
	146014 - 016	52	SOCKET, DIP - 16 CONTACTS	1K, 6B	2	<u> </u>	
	146014 - 040	53	SOCKET, DIP - 40 CONTACTS	2EF	1	<u> </u>	
	107201 - 001	54	DIODE 1N4150	CR1, 3-6	5		
	100373 - 012	55	DIODE, ZENER 1N759A	CR2	1	<u> </u>	
1	106500 - 114	56	CRYSTAL 3.579545 MHz	¥2	1	3.	

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ASSEMBLY PARTS LIST

S 7 0 1 1 M P 207005 — 001 REV N

4	alad produ	ens, inc.		(CONTINUATION)		ASSEMBLY PARTS NO	IMBER	
PART NUMBER 28 NO. DESCRIPTION					REMARKS	QUANTIT WHOLE i , DEC	Y U.M. CODE	
M P	102666	- 479	98	CAP., CER. 50v <u>+</u> 5% 4.7pf	C51	1		\perp
мР	102669	- ₅₆₁	99	CAP., CER.100v +5% 560pf NPO	C52	1		_
M P	151031	- 001	100	TRANSISTOR, PNP 2N3906	Ql	1		
M P	151030	- 001	101	TRANSISTOR, NPN 2N3904	Q2	1		_
M P	104903	- 001	102	CLIP, JUMPER .025 \$Q POST	TP17-18	1		_
M P	207338	- 001	103	SHIELD, CABLE				\perp
M P	105084	- 001	104	CONNECTOR-HOUSING, 4 PIN	J2	1		_
M P	106019	- 001	105	CONTACT, PIN	Ј2	4		4
M P	100171	- 002	106		J2	1		_
MP	150107	-001	107	TAPE, DOUBLE COATED POLYURETHANE FOAM	14G		5 06	\perp
MP	100360	-001	108	PIN, WIRE WRAP, .025 SQ.	TP1-18	18		
MP	147805	-001	109	SUPPORT, CIRCUIT BOARD		5		_
M P	100171	-001	110	TY-RAP 1/16 to 5/8		3		
M P	102668	-272	111	CAP., CER. 50v +5% 2700pf NPO	C11	1		_
M P	102664	-103	112	CAP., CER.50V-20% +80% 0.0luf Z5U	C53-C57	5		_
M P	102667	-102	113	CAP., CER. 100WVDC <u>+</u> 10% 1000pf	C62	1		
M P		_	114					\perp
M P	101156	_682	115	RESISTOR, W + 5% 6.8K	R83	1		
M P	101156	- 331	116	RESISTOR, 1/4W, ±5% 330	R84	1		
MP	101156	_ 221	117	RESISTOR, 1/4W,±5% 220	R85	1		
∰ P	104804	_ 001	118	CLAMP, CABLE		1		
FORM 79	68 (R 09/80)						PAGE 6 OF	10_

23b

207005 __ 001 | REV einher" ASSEMBLY PARTS LIST WHOLE DECIMAL CODE ITEM NO. REMARKS DESCRIPTION PART NUMBER M P 123123 - 001 120 I.C. 74LS09 M P 123246 _ 001 121 I.C. 74LS240 2K 1 122 I.C. 7414 M P 123001 _ 001 10H 123074 - 001 123 I.C. 74S32 120 1 4 126 CONN-PC, 50 PIN RIBBON P4.5 105008 _ 006 06 127 CABLE, FLAT 15 101045 _ 001 102669 _ 221 128 CAP., CER. 100WVDC±5% 220Pf C59 1 130 ASSY DWG CONTROLLER 207005 __ 100 131 PRINTED MASTER MP 207003 - 001



einher

ITEM NO.

101156 - 105 58 RESISTOR, W +5% 1.0M

101156 - 750 60 RESISTOR, w ±5% 75

M P 101156 - 392 61 RESISTOR, 3w +5% 3.9K

M P 101156 - 511 62 RESISTOR, 2w ±5% 510

M 101156 - 102 63 RESISTOR, 3w +5% 1K

101156 - 472 64 RESISTOR, w ±5% 4.7K

M P 101156 - 103 | 66 RESISTOR, 1/2W ±5% 10K

M P 101156 - 362 67 RESISTOR, 2w ±5% 3.6K

100155 - 164

101156 - 333 68 RESISTOR, 1 4w ±5% 53K

101156 - 473 69 RESISTOR, 12w ±5% 47K

101156 - 244 70 RESISTOR, \(\frac{1}{2} \text{W} \(\frac{+}{2} \text{5\%} \) 240K

101156 - 203 72 RESISTOR, \(\frac{1}{4}\text{w} \pm \frac{1}{2}\text{%} \) 20K

101156 - 562 73 RESISTOR, W +5% 5.6K

101156 - 823 74 RESISTOR, 3w ±5% 82K

100155 - 232 75 RESISTOR, 1/2W ±1% 255

100155 - 414 76 RESISTOR, 1/4w ±1% 20K

71 RESISTOR, 1/2W ±1% 49.9

106500 - 115 57 CRYSTAL 6.00 MHz

ASSEMBLY PARTS LIST



REMARKS

R1,28,29,31-34,36-41,

47,51,52,55, 60-62, 64-66, R73-77,79

R26,27,43,45,46,56, 57,86

R20.42

R23,44

R24,78

R13,14

R22,58

R30

R53

R72

R4,8

R12

R9,10,15,16,21,50,

R6, 80-82

R87

			ASSY, P	AR - C	ONTROLL	ER - 9	U 1ps	MOTOR COLO		03	OOK		Ú-T20	grafic (moly magnesses)
	P	ART NU	MBER 20	ITEM NO.			DESCRIPTION			REMARKS	QU/ WHOLE 12	DECIMAL 18	U.M. CODE	
	207	005	- 200	1	SCHEMA	TIC					. 0			
	207	041	- 001	2	ASSY,	8-BIT	EXPANDER MICROCOMPUTER		2EF(2	:07011-001 OPTIONAL)	1			
	207	021	- 001	3	ASSY,	POWER	CABLE - CONTROL				1			
	207	004	- 001	4	PROCES	S BOAR	ם				1			
	123	029	- 001	. 5	I.C. 7	4LS00			7B,	11D	. 2			
	123	149	- 001	6	I.C. 7	4LS01			13F		1			
. 7	.123	031	- 001	. 7	I.C. 7	4LS04			10D	, 12E,12K	3			
	1230	032	- 001	8	I.C. 7	4LS08			5ć,	5G	2			
	123	034	- 001	9	I.C. 7	4LS11			10F		. 1			
`,j''	1230	047	- 001	10	I.C. 7	4LS14			5B		1			
	1230	035	- 001	11	I.C. 7	4LS32			5F,	11F	. 2			
	1230	093	- 001	12	I.C. 7	4LS51			7A		. 1			
4	1230	084	- 001	13	I.C. 7	4LS109	1		13E		1			
	123	100	- 001	14	I.C.	74LS1	38		110	, 5D, 10E	. 3			
PREPA	RED SI	ie Rec	dmond	1-14-	82 K	12730	& R. Karker 93/83				DWG RE	L NO.	DATE	-
CHEC		—,;	re_	1-26.		12718	R. Parker 5/5/83	P	12986	n. R. Parker 19/4/85	8202			82
DESI		11. 11	19		-82 H				12849	R. Parky \$14/83	NEXT ASS	M M	0 0	Y Y
			2				3 R. Farker \$ 10/93			6 / John S/12/83		20735	0	
						12637			12741	1 R. Kuku 7/12/80	MODEL N	F420-	90	
					REV	ECO	DATE / SIGNATURE	REV	ECO	DATE / SIGNATURE				
ORM 7	96 (11 09/8	(0)										1	PAGE 1	or 10

ASSEMBLY PARTS LIST

40	100345	- 001	30	I.C. MC4044P
-	100343		- 50	2,0, 11010111
	123069	- 001	31	I.C. 74S124
	123235	- 001	32	I.C. MC14040BCP
M C	207029	_ 001	33	ASSY, PROM 512 x 4 (READ SEQUENCER)
	207026	- 001	34	ASSY, PROM 256 X 4 (WRITE SEQUENCER)
100	207024	- 001	35	ASSY, PROM 32 x 8 (READ DECODER)

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123232 - 001

100234 - 001

123245 - 001

123085 - 001 15 I.C. 74LS139

123095 - 001 16 I.C. 74LS153

123231 - 001 17 I.C. CD4502B 123090 - 001 18 I.C. 74LS163

123086 - 001 19 I.C. 74LS164

123096 - 001 21 I.C. 74LS174

123045 - 001 22 I.C. 74LS175

123233 - 001 23 I.C. 74LS195

123097 - 001 24 I.C. 74LS367

123091 - 001 25 I.C. 74LS374

123203 - 001 26 I.C. 74LS393

123234 - 001 27 I.C. 74S240

20 I.C. 74LS166

28 I.C. 9602

29 I.C. 9401

ASSEMBLY PARTS LIST

DESCRIPTION

2 REV

S 7 0 1 1 M P 207005 - 002 P

2

3 !

4

2 !

2

1

3 |

1

PAGE 2 OF 10

REMARKS

3E, 4E, 3F, 4F

11G

9B, 9C

9D,13D

4D, 5E, 13K

4C, 7E, 13G, 2H

6G, 7G, 6H, 7H, 6K

9G, 10G, 9H, 10K, 9K

10C, 9E, 11H

4H,5H,5K

2B. 3B.3K.4K

12B, 13B

13A, 11E

13C, 6F, 8F

8E

12A

10B

9F

3G, 3H

3C

WHOLE I DECIMAL CODE

S 7 0 1 1 M P	20		002	PEV		Œ	
ASSI					۹ ۾	dask	hallpr
REMARKS	WHOLE 1	, DECIMA	U.M. CODE] [19	PA
	. 1					M P	1001
	1					MP	1001
						M P	1011
	. 2				1 [M P	1000
	. 1					M P	1380
	. 3		1.			M P	1380
9,31-34,36-41, 2,55,	29] [M P	1300
-66, R73-77,79						MP	1420
13,45,46,56,	. 8] [MP	1027
	2] [MP	1027
	2					MP	1027
	4] [M P	1027
	2] [MP	1026
	2					MP	1026
	1					H P	1026
	1					M P	
	1					MF	1026
	2					M P	1026
	1					M P	
	1					M F	1026
,16,21,50,	. 8					M P	1026
		PAG	E_4_ (of 10	_ 1	ORM 79	58 (R 09/

<u>G</u>	GIDDEF.			ASSEMBLY PARTS LIST	S 7 0 1 1 M P	207	005 -	002	_
19	PART NU	MBER 28	ITEM NO.	DESCRIPTION	REMARKS	QU/ WHOLE 12	NTITY DECIMAL 18	U.M. CODE	-
M P	100155	- 385	77	RESISTOR, 1/4w <u>+</u> 1% 10K	R18,49,69,71	4		<u> </u>	
M P	100155	- 443	78	RESISTOR, 1/4w +1% 40.2K	R17,67	2			
M P	101156	271	79	RESISTOR, W + 5% 270 OHMS	R63	. 1			
M P	100067	- 101	80	RESISTOR, 1w <u>+</u> 5% 100	R48	1			
MA P	138002	- 503	81	POTENTIOMETER 12w, 50K	Rll	_1		<u> </u>	
M P	138002	- 103	82	POTENTIOMETER ½w, 10K	R25,R7	2			
M P	130003	502	- 83	POTENTTOMETER & 5K	R7		=		
MP	142032	- 002	84	TERMINATOR, 16 PIN, 180/390 OHM	ıĸ	1			
MP	102768	- 225	85	CAP., TANT. 10v+20% 2.2uf	C15	. 1			
MP	102768	- 475	86	CAP., TANT. 10v +20% 4.7uf	C20	1			
MP	102768	- 226	87	CAP., TANT. 10v +20% 22uf	C16	. 1			-
MP	102769	- 475	88	CAP., TANT. 35v ±20% 4.7uf	C17,21	. 2	i !		
M P	102668	- 472	89	CAP., CER. 50v +5% 4700pf NPO	C4,5	2			
MP	102665	- 104	90	CAP., CER. 50v -20+80% 0.10uf Z5U	C2,3,6,7,8,24-50	32	i 		
68 P	102669	- 301	91	CAP., CER. 100v +5% 300pf NPO	C9,10,13,60,61,63	6	1	<u> </u>	
MP		_	92				i !		
M F	102669	- 150	93	CAP., CER. 100v ±5% 15pf NPO	C14	1]	
M P	102673	_ 829	94	CAP., CER.100 V + 5%:8.2pf NPO	cl	1			
M P		_	95					Ι.	
MF	102668	- 391	96	CAP., CER. 50v ±5% 390pf NPO	C19	1		Τ.	
	102668	- 272	97	CAP., CER. 50v ±5% 2700pf NPO	C12	1			

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106500 - 114 56 CRYSTAL 3.579545 MHz

ASSEMBLY PARTS LIST

REMARKS 123238 - 001 36 I.C. MM5257N-25 8G, 8H, 8K 125040 - 001 37 I.C. TL082P 11A 101022 - 001 38 I.C. LM311 2G 123036 - 001 39 I.C. 74LS74 11B, 6C, 12D, 12G,12H 100336 - 001 40 I.C. 7438 4B 207027 - 001 41 ASSY, PROM 256 X 4 (HOST SEQUENCER) 11K 207025 - 001 42 ASSY, PROM 32 X 8 (WRITE ENCODER) 13H 125006 - 005 43 I.C. UA7805UC 14G 123237 - 001 | 44 | I.C. 74LS373 1 3D 123023 - 001 45 I.C. 74S74 7D, 6D, 7F 3 123028 - 001 46 I.C. 74S00 8C 47 I.C. 74S04 7C 1 123046 - 001 101031 - 001 48 I.C. 75452 6A 123119 - 001 49 I.C. 74S163 8D 123120 - 001 50 I.C. 74S174 8B 1 123152 - 001 51 I.C. 74LS273 146014 - 016 52 SOCKET, DIP - 16 CONTACTS 1K, 6B 146014 - 040 53 SOCKET, DIP - 40 CONTACTS 2EF 107201 - 001 | 54 | DIODE 1N4150 CR1, 3-6 100373 - 012 55 DIODE, ZENER 1N759A CR2

S 7 0 1 1 M P 207005 - 002 P

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ASSEMBLY PARTS LIST

S 7 0 1 1 M P 207005 - 002 P

	PART NUMBER			DESCRIPTION	REMARKS	WHOLE	DECIMAL 18	U.M.	-
18 8 P	102666	- 479	NO. 98	CAP., CER. 50v ±5% 4.7pf	C51	12	18		
i P	102669	- 561	99		C52	1	• • •		
P									
-	151031	- 001	100	TRANSISTOR, PNP 2N3906	Q1	1			
I P	151030	- 001	101	TRANSISTOR, NPN 2N3904	Q2	1			
1.0	104903	- 001	102	CLIP, JUMPER .025 SQ POST	TP17-18	1			
A.P.	207338	⁻ 001	103	SHIELD, CABLE					_
1 P	105084	- 001	104	CONNECTOR-HOUSING, 4 PIN	Ј2				_
A P	106019	- 001	105	CONTACT, PIN	Ј2	4			
A P	100171	- 002	106		J2	1			
A P	150107	- 001	107	TAPE, DOUBLE COATED POLYURETHANE FOAM	14G		5	96	
a P	100360	- 001	108	PIN, WIRE WRAP, .025 SQ.	TP1-18	18			
4 P	147805	- 001	109	SUPPORT, CIRCUIT BOARD		. 5			_
W P	100171	- 001	110	TY-RAP 1/16 TO 5/8		3			
	102669	- 911	111	CAP., CER. 100v +5% 910pf NPO	C11	1			_
	102664	103	112	CAP.,CER.50V-20% +80% 0.0luf Z5U	C53-C57	5			L
	102667	- 102	113	CAP., CER. 100WVDC +10% 1000pf	C62	1			L
747	101156	_ 202	114	Resistor, 1/4W+5% 2K	R5	1			L
2	101156	_ 682	115	RESISTOR, W + 5% 6.8K	R83	1			L
	101156	- 331	116	RESISTOR, 1/4W <u>+</u> 5% 330	R84	1			L
1	101156	_ 221	117	RESISTOR, 1/4W <u>+</u> 5% 220	R85	1			_
	104804	_ 001	118	CLAMP, CABLE		1			

	1 5 52 61
ASSEMBLY PARTS LIST	S 7 0 1 1 M P 207005 003 FEV
ASSEMBLE PARTS LIST (CONTINUATION)	ASSEMBLY PART NUMBER

GUNIE!			ASSEMBLY PARTS LIST	S 7 0 1 1 M	S 7 0 1 1 M P 20/005 - 003				
Gardon Grov	e Civilsian		(CONTINUATION)				-	-	
19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	WHOLE 12	ANTITY DECIMAL 18	U.M. CODE		
					-			\dashv	
Ñ P	123085 - 001	15	I.C. 74LS139	IIG					
M P	123095 — 001	16	I.C. 74LS153	3E, 4E, 3F, 4F	4			\perp	
MP	123231 - 001	17	I.C. CD4502B	9B, 9C	2				
M P	123090 - 001	18	I.C. 74LS163	9D, 13D	2			\perp	
MP	123086 — 001	19	I.C. 74LS164	4D, 5E, 13K	3				
MP	123232 _ 001	20	I.C. 74LS166	4C, 7E, 13G, 2H	4			_	
M P	123096 _ 001	21	I.C. 74LS174	10C, 9E, 11H	3				
мР	123045 _ 001	22	I.C. 74LS175	4H, 5H, 5K	3			\perp	
M P	123233 _ 001	23	I.C. 74L5195	3G, 3H	2				
MP	123097 _ 001	24	I.C. 74L5367	6G, 7G, 6H, 7H, 6K	5	!			
MP	123091 _ 001	25	I.C. 74L5374	3C	1				
M P	123203 _ 001	26	I.C. 74LS393	9G, 10G, 9H, 10K, 9K	5	<u> </u>			
MP	123234 _ 001	27	I.C. 74S240	2B, 3B, 3K, 4K	4				
MP	100234 _ 001	28	I.C. 9602	128, 138	2	<u> </u>			
M P	123245 _ 001	29	I.C. 9401	13A, 11E	2				
MP	100345 _ 001	30	I.C. MC4044P	8E	1				
MP	123069 _ 001	31	I.C. 745124	12A	1	i !			
M P	123235 001	32	I.C. MC14040	13C, 6F, 8F	3				
MP	207029 001	33	ASSY, PROM 512 X 4 (READ SEQUENCER)	10B				. [

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_	total appropriate

ASSEMBLY PARTS LIST

S 7 0 1 1 M P 207005 - 002 P ASSEMBLY PART NUMBER

19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	QU/ WHOLE 12	DECIMAL 18	U.M. CODE		
M P	_	119							
M P	123123 - 001	120	I.C. 74LS09	4 G	1			<u></u>	L
M.P	123246 _ 001	121	I.C. 74LS240	2 K	1			<u> </u>	L
M P	123001 _ 001	122	I.C. 7414	10H	1				L
M P	123074 _ 001	123	I.C. 74S32	120	1				
M P		124	•						l
MP	100383 _ 930	125	WIRE, JUMPER 30GA	90IPS (USE BARE WIRE)	1	.05			
M P	105008 - 006	126	CONN-PC, 50 PIN RIBBON	P4,5	4			_	L
M P	101045 - 001	127	CABLE, FLAT		15		06	L	l
M P	102669 - 221	128	CAP., CER. 100 WVDC+5% 220Pf	C59	1			L	L
M P		129					L	L	L
M P	207005 - 100	130	ASSY DWG CONTROLLER		0		<u> </u>	_	ļ
M P	207003 - 001	131	PRINTED MASTER		0		L		1
M P	<u> </u>						L	L	1
M.P	<u> </u>							L	l
M P	_							L	1
M P	-							L	1
M P	_							<u>L</u>	1
M P					L.			05 1	l

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Gardon Grove Dhilston

ASSEMBLY PARTS LIST

S 7 0 1 1 M P 207005 — 003 REV ASSEMBLY PART NUMBER

U.M. 18 CODE	19	PART NUMBER 28	ITEM NO.	DESCRIPTION	REMARKS	WHOLE 12	DECIMAL 18	U.M. CODE	
4-4-4	l L								
	MP	207026 - 001	34	ASSY, PROM 256 X 4 (WRITE SEQUENCER)	9F			-	
	MP	207024 - 001	35	ASSY, PROM 32 X 8 (READ DECODER)	6E			-	_
	M P	123238 — 001	36	I.C. MM5257N-25	8G, 8H, 8K	3			_
	MP	125040 — 001	37	I.C. TL082P	IIA	1			_
	MP	101022 - 001	38	I.C. LM311	2G	1			_
	M P	123036 - 001	39	I.C. 74LS74	11B, 6C, 12D, 12F 12G, 12H	6			_
	M P	100336 - 001	40	I.C. 7438	4B				<u> </u>
	MP	207027 001	. 41	ASSY, PROM 256 X 4 (HOST SEQUENCER)	IIK	\perp			<u>_</u>
	MP	207025 - 001	42	ASSY, PROM 32 X 8 (WRITE ENCODER)	13H				L
	MP	125006 - 005	. 43	I.C. UA7805UC	14G				L
	MP	123237 - 001	44	I.C. 74L5373	3D				Ĺ.
	MP	123023 - 001	45	I.C. 74574	7D, 6D, 7F	. 3			L
	M P	123028 001	46	I.C. 74500	8C			<u> </u>	L
	M P	123046 - 001	. 47	I.C. 74504	7C .				L
	NA P	101031 001	48	I.C. 75452	6A				L
	MP	123119 - 001	49	I.C. 74S163	8D	1.1		<u> </u>	L
	M P	123120 - 001	50	I.C. 745174	8B	1			L
	MP	123152 - 001	51	I.C. 74LS273	2C .				L
	MP	146014 - 016	52	SOCKET, DIP - 16 CONTACTS	IK, 6B	2			L



ASSEMBLY PARTS LIST

A55Y,	PWB - CONTROLLER	₹ - 30 IF	-3 D	SC:	К		Q120			S 7 0 1 1 M	ASSE	20700 MBLY PA	ART NU	003 MBER	_
19	PART NUMBER	ITEM NO.				DESCRIPTION				REMARKS	WHOLE 12	DEC	MAL 18	U.M. CODE	
	207005 — 200		SCHE	MA.	TIC						0	<u> </u>			
	207011 - 002	2	ASSY	, 8-E	BITMIC	ROCOMPUTER E	XPAND	ER	2EF	(207041-002 is	1				
	207021 - 001	3	ASSY	, PO	WER C	ABLE - CONTRO	L				1	<u> </u>			_
	207004 - 001	4	PROC	ESS	BOAR)					1				
2	123029 — 001	5	I.C. 7	4LS(00				7B, I	ID	2	<u> </u>			
	123149 — 001	6	I.C. 7	4LS(01				13F		1	<u> </u>			
	123031 — 001	7	I.C. 7	4LS0)4				10D,	12E, 12K	3	!			
	123032 _ 001	8	I.C. 7	4LS(08				5C, 5	iG	2	!			
	123034 _ 001	9	I.C. 7	4LS	11:				IOF		1.				
	123047 _ 001	10	I.C. 7	4LS	14				58		1	<u> </u>			_
	123035 _ 001	-11	I.C. 7	4LS3	32			. !	F, 1	.1F	2				
	123093 _ 001	12	I.C. 7	4LS5	51				7A		1				
	123084 _ 001	13	I.C. 7	4LSI	109				13E		1				
	123100 _ 001	1	I.C. 7	4LSI	38				IIC,	5D, 10E	3	<u> </u>			mad i
PARED	J. MAY	01-1	1-83	П					T		DWG R			DATE	
CKED	You Misk i see		/23								820-	ربر .	01	17	Ŀ
SIGN	L. ta ku	1/17	193								NEXT AS	SEMBLY		D D	L
		1		L	12986	& Charten	2.5						0735	U -	
				-	12855	111111111111111111111111111111111111111			1		MODEL		20-3	0	
795 (R	03/82)			REV	ECO	DATE / SIGNATU	RE RE	V ECC		DATE / SIGNATURE				AGE 1	-
,11														AGE 1	o

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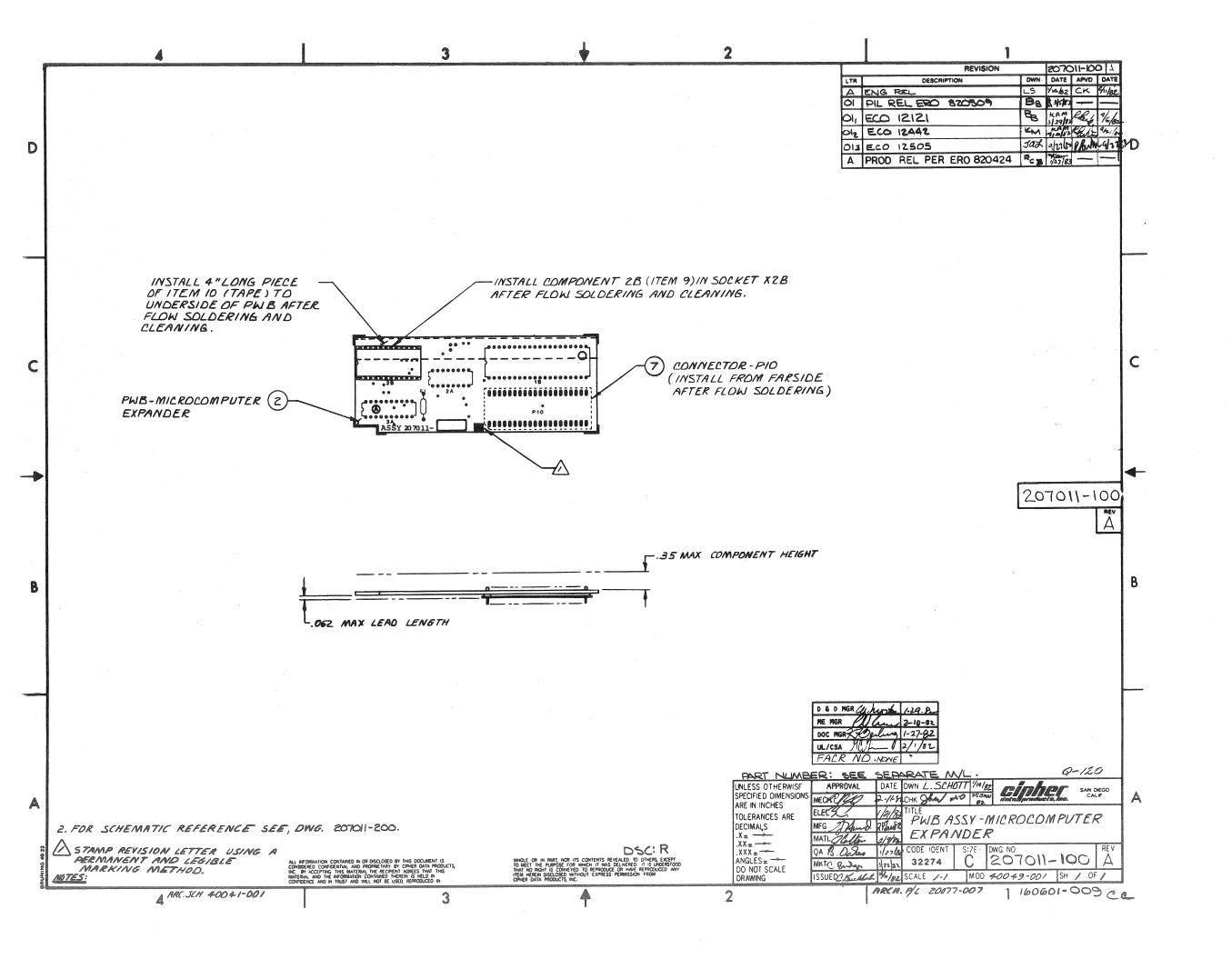
ASSEMBLY PARTS LIST

	ASSEMBLY PARTS LIST arten Greve Division (CONTINUATION)					BLY PART NO	JMBER	
19	PART NUMBER 28	ITEM NO.	DESCRIPTION	REMA: KS	WHOLE 12	NTITY DECIMAL 18	U.M. CODE	
								\dashv
M P	146014 - 040	53	SOCKET, DIP - 40 CONTACTS	2EF				\pm
M P	107201 - 001	54	DIODE IN4150	CRI, 3-6	5	-		
M P	100373 — 012	55	DIODE, ZENER IN759A	CR2	1			
M P	106500 — 114	56	CRYSTAL 3.579545 MHz	Y2	1			
M P	106500 — 115	57	CRYSTAL 6.00 MHZ	YI	1			
M P	101156 105	58	RESISTOR, %w ±5% 1.0M	R59	1	<u> </u>		
M P	101156 _ 302	59	RESISTOR, %w ±5% 3K	R2, 8	2			
M P	101156 _ 750	60	RESISTOR, %w ±5% 75	R20, 42	2			
мР	101156 _ 392	61	RESISTOR, %w ±5% 3.9K	R87	1			
M P	101156 511	62	RESISTOR, %w ±5% 510	R3, 5, 19, 35	4			
M P	101156 _ 102	63	RESISTOR, %w ±5% IK	R1,28, 29, 31-34, 36-41 47, 51, 52, 55, 60-62,	29			
M P				64-66, R73-77, 79				
MP	101156 - 472	64	RESISTOR, %w +5% 4.7K	R26, 27, 43, 45, 46, 56 57, 86	8			
MP	101156 - 512	65	RESISTOR, %w ±5% 5.1K	R23, 44	2			
M P	101156 - 103	66	RESISTOR, %w +5% 10K	R24, 78	2	i 		
M P	101156 - 362	67	RESISTOR, %w ±5% 3.6K	R6, 80-82	4			
M P	101156 - 333	68	RESISTOR, Nw ±5% 33K	R13, 14	2			
M P	101156 _ 473	69	RESISTOR, %w ±5% 47K	R22, 58	2			
M P	101156 _ 244	70	RESISTOR, %w ±5% 240K	R30				
ORM 795 (F	R 03/82) (Continuation)					PAGE	4_0	F _9.

GIJ) Garden Gre	TEL "		ASSEMBLY PARTS LIST	\$ 7 0 1 1 M	ASSEMBLY PAR	- Company of the Comp	Ell fill de la company de la c	NEL "
19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	QUANTITY WHOLE DECIMA	U.M. 18 CODE	19	PART NUW
Ĺ								
MP	100155 - 164	71	RESISTOR, %w ±1% 49.9	R53	1		MP	102665
M P	101156 — 203	72	RESISTOR, %w ±5% 20K	R72			M P	102669
MP	101156 — 562	73	RESISTOR, %w ±5% 5.6K	R4	1		14 6	102667
M P	101156 — 154	74	RESISTOR, %w ±5% I50K	RI2			M B	102669
M P	100155 _ 232	75	RESISTOR, %w ±1% 225	R54	1		MP	102669
MP	100155 _ 414	76	RESISTOR, %w ±1% 20K	R9, 10, 15, 16, 21, 50 68, 70	8		MP	102669
MP	100155 - 385	77	RESISTOR, %w +1% 10K	RI8, 49, 69, 71	4		MP	102668
мР	100155 - 443	78	RESISTOR, %w +1% 40.2K	RI7, 67	2		MP	102668
MP	101156 - 271	79	RESISTOR, %w ±5% 270 OHMS	R63			MP	102666
MP	100067 - 101	80	RESISTOR, I%w +5% 100	R48			MP	102669
MP	138002 - 503	81	POTENTIOMETER 1/2w, 50K	RII			M P	151031
M P	138002 — 103	82	POTENTIOMETER 1/2w, 10K	R25, R7	2		MP	151030
M P	-138002 502	- 83-	POTENTIOMETER by, SK	87			NA P	104903
M P	142032 - 002	84	TERMINATOR, 16 PIN, 180/390 OHM	IK			M P	207338
MP	102768 — 225	85	CAP., TANT. 10v ±20% 2.2uf	C15			MIP	105084
MP	102768 — 475	86	CAP., TANT. 10v ±20% 4.7uf	C20			мР	106019
MP	102768 — 226	87	CAP., TANT. 10v <u>+</u> 20% 22uf	C16			MP	100171
MP	102769 — 475	88	CAP., TANT. 35v <u>+</u> 20% 4.7uf	C17, 21	2		MP	150107
MP	102668 _ 472	89	CAP., CER. 50v ±5% 4700pf NPO	C4	1		MP	100360

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19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	GUA WHOLE	NTITY DECIMAL 18	U.M. CODE	П	19	PART NUMBER
		ļ			+			\dashv		147805 -
	102665 - 104	90	CAP., CER. 50v -20+80% 0.10uf Z5U	C2, 3, 6, 7, 8, 24-50	32			+	M P	100171
p	102669 - 301	91	CAP., CER.100v +5% 300pf NPO	C9, 10, 60, 61,63	5			П	M P	102668 —
7	102667 — 563	92	CAP., CER.100v+10% .056uf X7R	C5				П	M P	102664 —
	102669 — 150	93	CAP., CER.100v±5% I5pf NPO	C14	ī			П	M P	102667 —
P	102669 — 330	94	CAP., CER.100v±5% 33pf NPO	CI					M 'P	-
P	102669 _ 911	95	CAP., CER.100v±5% 910pf NPO	C13	1			\Box	M P	101156 —
	102668 _ 122	96	CAP., CER. 50v ±5% 1200pf NPO	C19	- 1				M P	101156 -
p	102668 _ 822	97	CAP., CER. 50v ±5% 8200pf NPO	C12	1			. Ш	M P	101156
	102666 _ 479	98	CAP., CER. 50v ±5% 4.7pf	C51	1				M P	104804
P	102669 _ 561	99	CAP., CER.100v±5% 560pf NPO	C52	1				M P	_
P	151031 _ 001	100	TRANSISTOR, PNP 2N3906	QI				Ш.	M P	123123 _
P	151030 _ 001	-101	TRANSISTOR, NPN 2N3904	Q2	1				M P	123246 _
p.	104903 _ 001	102	CLIP, JUMPER .025 SQ POST	TP17-18	1				M P	123001 -
p	207338 _ 001	103	SHIELD, CABLE		179.50	1. 3448		Ш.	M P	123074 _
•	105084 001	104	CONNECTOR-HOUSING, 4 PIN	J2	1				M P	105008 _
P	106019 _ 001	105	CONTACT, PIN	J2	4	1.54.1	14.4	7,2%	M P	101045 _
P	100171 _ 002	106	TY-RAP 1/16 -1%	J2	1				M P	102669
7	150107 _ 001	107	TAPE, DOUBLE COATED POLYURETHANE FOAM	14G		5	06		M P	207005 _
ß	100360 - 001	100	PIN. WIRE WRAP025 SQ.	TPI_ 18	. 18			П	M P	207003 _

	Austa, Ing.		ASSEMBLY PARTS LIST	S 7 0 1 1 M	ASSEMI	207005 — (
19	PART NUMBER 28	ITEM NO.	DESCRIPTION	REMARKS	WHOLE I	DECIMAL C	J.M. ODE	
	,						\bot	_
	147805 - 001	109	SUPPORT, CIRCUIT BOARD		5		4	
W P	100171 _ 001	110	TY-RAP 1/16 to 5/8		3		_	_
W P	102668 - 272	111	CAP., CER.50v±5% 2700pf NPO	C11	1		_	_
M P	102664 - 103	112	CAP., CER. 50v-20% +80% 0.01uf Z5U	C53-C57	5		1	_
M P	102667 _ 102	113	CAP., CER. 100 WVDC ±10% 1000 pf	C62	1		_	
M P		114					_	_
M P	101156 — 682	115	RESISTOR,¼w±5% 6.8K	R83	1		_	
M P	101156 - 331	116	RESISTOR,¼w±5% 330	R84	1		_	
M P	101156 — 221	117	RESISTOR,¼w±5% 220	R85	1		_	
M P	104804 _ 001	118	CLAMP, CABLE		1		_	
M P		119					_	
M P	123123 _ 001	120	I.C. 74LS09	4G	1		_	
M P	123246 _ 001	121	I.C. 74LS240	2K	1		_	_
M P	123001 - 001	122	I.C. 7414	10H	1		_	
МР	123074 — 001	123	I.C. 74S32	12C	1		_	
M P	105008 006	126	CONN-PC, 50 PIN RIBBON	P4,5	4		_	
M P	101045 _ 001	127	CABLE,FLAT		15	-	06	
мР	102669 _ 221	128	CAP., CER. 100WVDC±5% 220PF	C59	1			
мР	207005 _ 100	130	ASSY DWG CONTROLLER		0		_	
M P	207003 _ 001	131	PRINTED MASTER		0		7 01	gadyn



25b.

26.

ASSEMBLY PARTS LIST

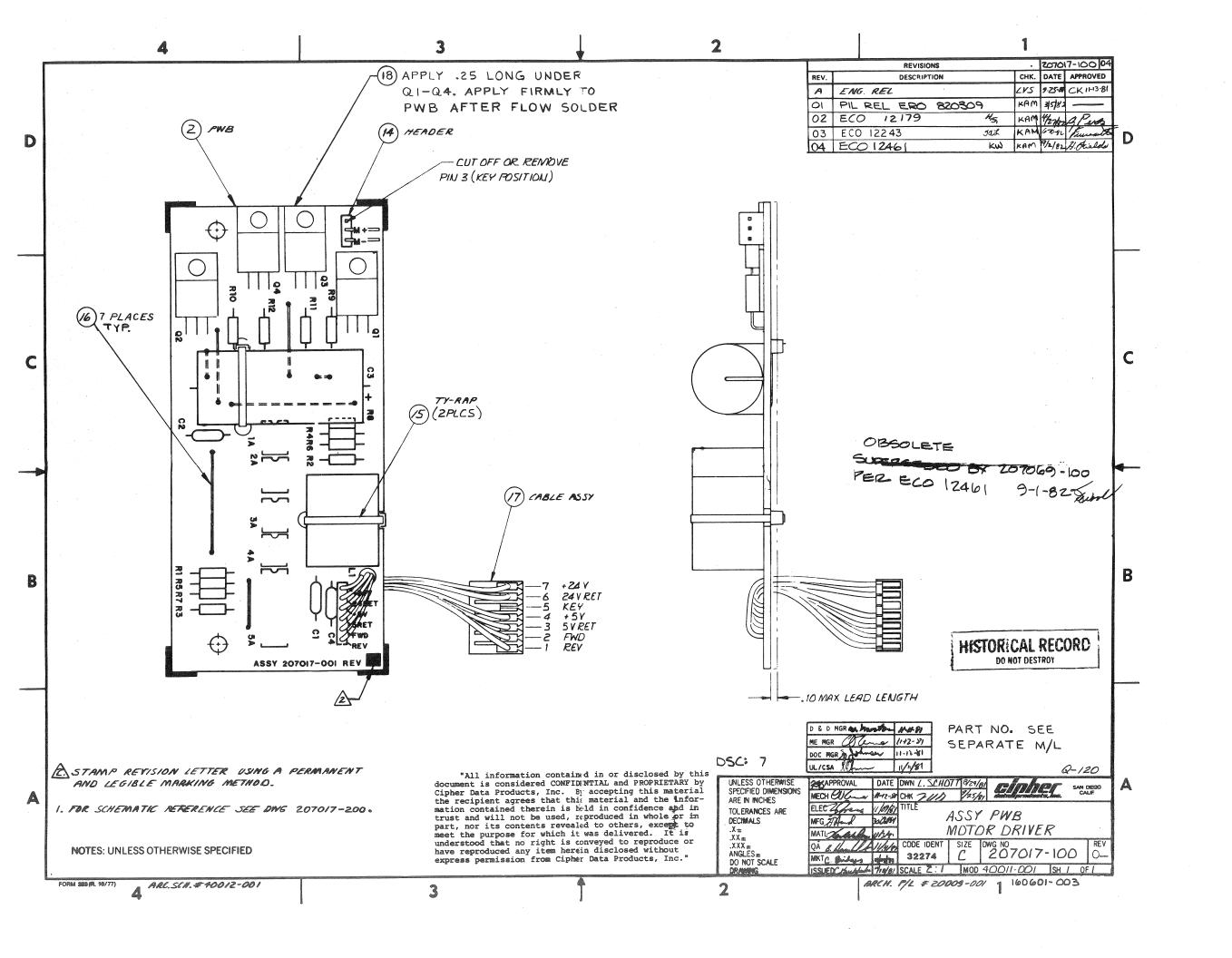
ASSY, PWB - MICROCOMPUTER EXPANDER



WHOLE DECIMAL CODE ITEM NO. DESCRIPTION PART NUMBER REMARKS 207011 - 200 1 SCHEMATIC 207010 - 001 2 PROCESS BOARD 123192 - 001 3 I.C. P8035 123045 - 001 4 I.C. 74LS175PCB 123237 — 001 5 I.C. SN74LS373N 102665 - 104 6 CAP., CER. 50v -20+80% 0.luf 137905 - 040 7 CONNECTOR - DIP PLUG P10 146014 - 024 8 SOCKET - DIP, 24 CONTACTS х2в 1 9 ASSY, PROM 2K X 8 207028 - 001 150107 - 002 10 TAPE, URETHANE FOAM 1/16 x 3/8 207009 — 001 207009 - 001 13 PRINTED MASTER 207011 — 100 14 ASSY DWG 0 PREFARED Sue Redmond 1-14-82
CHIEGEED 1-12-9
ESSIGN 1-12-9-8-1-12-820287 2 1 82 M M D/D V/ Y NEXT ASSEMBLY 207005-001 820287 F420-30/90 PAGE 1 OF 2

ASSEMBLY PARTS LIST

datablerode	ohs, Ann.				AS:	SEMBLY PARTS	SI	JST						
Gurdan Grave D		DSC	: R						1 5	52				S1 BEV
ASSEMBLY TI	ASSY, PWB -	MICR	ОСОМР	UT	ER EXP		C COD Q	E: 120	S 7 0 1 1 M P	9	207011			B
								·			ABLY PAR			
19	PART NUMBER	ITEM NO.	ľ			DESCRIPTION			REMARKS	WHOLE	DECIM	AL C	J.M. ODE	
£s.	207011 _ 200	1	SCHE	MA	TIC			T		0				
T.	207010 _ 001	2	PROC	ES	S BOARI	D				1				
	123192 _ 001	3	I.C.	P	8035			18		1		\Box		
	123045 _ 001	4	I.C.	7	4LS175F	PCB		2A		1				
Ŷ.	123237 _ 001	5	I.C.	SI	N74LS37	73N		3A		1				
i.	102665 _ 104	6	CAP.	, (CER. 50	OV -20+80% o.1uf		C1		. 1				
10	137905 _ 040	7	CONN	EC.	TOR - D	DIP PLUG		P10		1				1 1
10	146014 _ 024	8	SOCK	ΕT	- DIP,	, 24 CONTACTS		X2B		1				
ĵą.	207028 - 002	9	ASSY	, F	PROM 2	(X 8		2B		1				\perp
	150107 — 002	10	TAPE	, (JRETHAN	E FOAM		1/16	X 3/8		4		06	
ž,	· · · · · -													
										L	<u> </u>			
) je	207009 - 001	13	PRIN	TE	MASTE	ER .				0				
*	207011 - 100		ASSY	D₩	/G					0	l I I			
PREPARED	S. HENCKE	01-17	7-83	Г						DWG RE	L NO.		DATE	
CHECKED	Hom Makham.	1/12/								8204	+55			
DESIGN ENGINEER	R. Parker	1/17/				- /				NEXT AS		A M	D D	YY
71.	And the second second	-		В	12855	3 R. Par Ren 9/4/30				1	7005-	003		
				A	PROD.					MODELN		20-3	30/9	0
				REV		DATE / SIGNATURE	REV	ECO	DATE / SIGNATURE	1			, .	•
ORM 795 (R C	03/82)	-					denunci	Carlot government/e				Pi	AGE 1	of _2



207017 - 200

207016 - 001

123244 - 001

123236 - 101

151027 - 002

151028 - 002

101156 - 750

101156 - 222

101156 - 682

102665 - 104

ASSEMBLY PARTS LIST

S 7 0 1 1 207017 - 001 04

ASSY, PWB - MOTOR DRIVER Q 120 DSC:4 WHOLE DECIMAL CODE NO. HISTORICAL RECORD 1 SCHEMATIC DO NOT DESTROY 2 PROCESS BOARD 3 PHOTOTRANSISTOR 4N28 1A,2A,3A,4A 4 I.C. 7438 5A 5 TRANSISTOR, NPN T1P120 Q2,Q4 Q1,Q3 6 TRANSISTOR, PNP T1P125 7 RESISTOR, 1/2w ±5% 75 R1,R3,R5,R7 8 RESISTOR, 1/2 ±5% 2.2K R9,R10,R11,R12 9 RESISTOR, *w +5% 6.8K R2,R4,R6,R8 102608 - 108 10 CAP., ELEC. 35v -10%+50% 1000uf 11 CAP., CER. 50v -20+80% .luf C1,C2,C4 122522 - 001 13 INDUCTOR- 100uh 10% 120915 - 003 14 HEADER, RIGHT ANGLE DWG REL NO. 820294 2 10 82 M M D D Y Y EYT ASSEMBL 207358,207359 F/0420-30/90

S 7 0 1 1 M P 207017 - 001 04 WHOLE , DECIMAL CODE REMARKS M P 100171 - 002 15 TY-RAP 1/16-14 C3,L1 M P 164021 - 926 16 WIRE, HOOKUP 26 AWG 7 M P 207018 - 001 17 ASSY, CABLE, MOTOR DRIVER PWB M P 150107 _ 001 18 TAPE, DOUBLE COATED POLYURETHANE 1 M P 207017 _ 100 19 ASSY, DWG M P 207015 - 001 0 20 PRINTED MASTER ---_

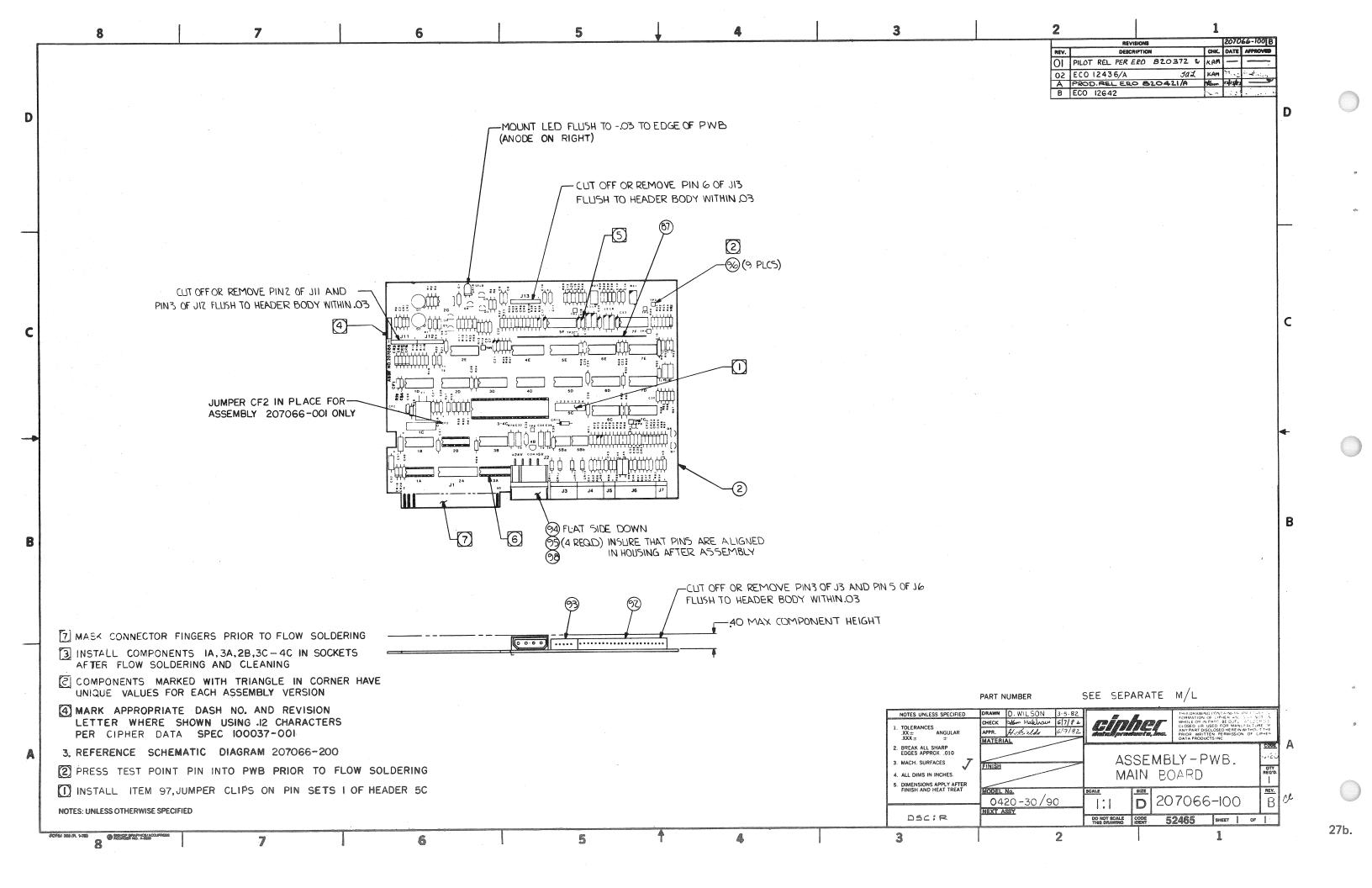
PAGE 2 OF 3

ASSEMBLY PARTS LIST

PAGE 1 OF 3

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27.



ASSY, PWB - MAIN - 30 IPS

102669 -200 76 CAP., CER. 100v ±5% 20pf

DSC:R Q 120

19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	GUANTITY WHOLE DECIMAL	U.M. CODE
	207066 — 200	1	SCHEMATIC		0	
	207065 - 001	2	PROCESS BOARD		1	
	207030 - 001	3	ASSY, PROM 8 BIT MICROCOMPUTER	3-4C	1	
	123029 - 001	4	I.C. 74LS00	6E	1	
	123030 - 001	5	I.C. 74LS02	4D	1	
•	123031 - 001	6	I.C. 74LS04	1B, 3B, 1D, 5D	4	
	123123 - 001	. 7	I.C. 74LS09	2D	1	
	123036 - 001	8	I.C. 74LS74	3D, 6D, 5E	3	$\neg \vdash \vdash$
	123038 - 001	. 9	I.C. 74LS86	7C	1	
	123234 - 001	10	I.C. 74S240	2A	1	
	101139 - 001	11	I.C. 75451	2G	1	
	101031 - 001	12	I.C. 75452	5Ba, 5Bb	2	
	100331 - 001	13	I.C. 7406	7D	1	
	100234 - 001			4E	1	
REPAREC		3-5-8	32 A 820421/A 12/14/8 2 F 1	2771/A Lacher 4/2/83	DWG REL NO.	DATE
DESIGN	Ham Makeliawi	3/12/	82 04 12521 3 Alley 1626-82 E 1	2728 El / July 5/6/83		12 82
NGINEER	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		NEXT ASSEMBLY	DDVV
				2636 K. Facker 2/7/8	207359 MODEL NO.	,
	-		REV ECO DATE /SIGNATURE REV	ECO DATE / SIGNATURE	0420-30	

PAGE 4 OF 7

ASSEMBLY PARTS LIST

S 7 0 1 1 M P 207066 - 001 F WHOLE DECIMAL CODE DESCRIPTION REMARKS PART NUMBER 100155 - 347 57 RESISTOR, 1/4W ±1% 4.02K R40,44 58 RESISTOR, 1/2W ±1% 4.42K 100155 - 351 R32,33 59 RESISTOR, 1/2W +1% 10K 100155 - 385 R25,26,36,37,52 100155 - 415 60 RESISTOR, 1/3W +1% 20.5K 100064 - 620 61 RESISTOR, ½w +5% 62 142027 - 001 62 TERMINATOR - 14 PIN 180/390 OHM 1A 142032 - 002 63 TERMINATOR - 16 PIN 180/390 OHM 3A 64 POTENTIOMETER 12w 100K 138002 - 104 65 POTENTIOMETER 12W 2K 138002 - 202 R31 102768 - 225 66 CAP., TANT. 10v ±20% 2.2uf C28,38 102871 - 225 67 CAP., TANT. 20v +20% 2.2uf C34 102769 - 475 68 CAP., TANT. 35v +20% 4.7uf C32 102870 - 685 69 CAP., TANT. 4v ±20% 6.8uf C11,13 102768 - 226 70 CAP., TANT. 10v +20% 22uf C35,51,52 102667 - 472 71 CAP., CER.100v +10% .0047uf C37, 54 2 72 CAP., CER. 100v +10% .001uf C43,46-49 C1,5,7-10,12,14,15, 23-27,29-31,33,36, C39-42 73 CAP., CER. 50v -20+80% .1 uf 23 102665 - 104 102667 - 104 74 CAP., CER. 100v +10% .luf C44,45 102673 -479 75 CAP., CER. 100v + 10% 4.7pf C50

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ASSEMBLY PARTS LIST

S 7 0 1 1 M P 207066 — 001 FF

35	PART NU	MBER 28	NO,	DESCRIPTION	REMARKS	WHOLE 12	, DECIMAL 18	CODE		
NA P	123239	- 001	15	I.C. LM319	7E	1				
M	125011	- 001	16	I.C. LM339	6C	1				_
14.2	125017	- 015	1.7	I.C. MA78L15	4B	1				
M P	101032	- 001	18	I.C. NE592	5F, 7F	2				
	146014	-014	19	SOCKET, DIP - 14 CONTACTS	2B, 1A	. 2				
N P	146014	- 016	20	SOCKET, DIP - 16 CONTACTS	3A	1				
МР	146014	- 040	21	SOCKET, DIP - 40 CONTACTS	3-4C	1				
M P	120909	- 003	22	HEADER, PROGRAM - DIP	2B	1				
M P	151032	- 001	23	TRANSISTOR PNP Q2T2905	2E	1				
MP	151030	- 001	24	TRANSISTOR NPN 2N3904	Q3-7	. 5				_
M P	151033	- 001	25	TRANSISTOR NPN MM3007	Q1,2	. 2				
M P	107029	- 001	26	DIODE 1N4001	CR15	1				_
M f	107201	-001	27	DIODE 1N4150	CR1-14, CR18-25	22				_
M P	107005	-001	28	LED, INDICATOR MV5054-2	CR16	1				
9.6	106500	-114	29	CRYSTAL - 3.579545 MHz	Yl	1				_
	101156	- 100	30	RESISTOR, 🍿 ±5% 10	R23,24	2				
10.5	101156	- 330	31	RESISTOR, ¼w ±5% 33	R48	1				_
64	100155	-164	32	RESISTOR, 1/2 ±5% 49.9	R4	. 1				
84 P	101156	-121	33	RESISTOR, w ±5% 120	R2,3	2				
M	101156	-161	34	RESISTOR, w ±5% 160	R90	1				_
M F	101156	-221	35	RESISTOR, 1/2W ±5% 220	R54	1			0.0	_
FORM 79	58 (R 09/80)						PAGE	2 0	₌ 7	_

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ASSEMBLY PARTS LIST

S 7 0 1 1 M P 207066 - 001 F

19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	WHOLE	ANTITY DECIMAL 18	U.M. CODE	
P	102669 - 330	77	CAP., CER. 100v +5% 33pf	C16	1	1 (1		
P	102669 - 620	78	CAP., CER. 100v +5% 62pf	C53	1			
P	102669 - 101	79	CAP., CER.100v <u>+</u> 5% 100pf	C22	1			_
p	102669 - 131	80	CAP., CER. 100v +5% 130pf	C21	1			
P	102669 - 301	81	CAP., CER. 100v +5% 300pf	C20	1			
P	102669 - 122	82	CAP., CER. 100v +5% 1200pf	C18,19	2			
P	102669 - 302	83	CAP., CER. 100v +5% 3000pf	C17	1			
P	122502 - 001	84	INDUCTOR, 10uh <u>+</u> 5% 290ma	L7,8	2			
p	122502 - 010	85	INDUCTOR, 820uh <u>+</u> 5% 77ma	L3,4	. 2			_
P	122502 - 009	86	INDUCTOR, 360uh +5% 108ma	L5,6	2			
P	102002 - 001	87	BUS BAR - VERTICAL		1			_
P	100143 - 002	88	PAD, TRANSISTOR TO-5	Use with Q1, Q2	2			-
Þ	120905 -011	89	HEADER, DOUBLE ROW, STRAIGHT	5C	1			
*	120916 - 001	90	HEADER, RIGHT ANGLE	J13	1			
F	120916 - 002	91	HEADER, RIGHT ANGLE	J11,12	1			
	120915 - 024	92	HEADER, RIGHT ANGLE	J4-7	1			
	120915 - 007	93	HEADER, RIGHT ANGLE	J3	1			
	105084 - 001	94	CONNECTOR-HOUSING, 4 POS.	Ј2	1			
	106019 - 001	95	CONTACT-PIN	J2	4			
	100360 — 004	96	PIN, WIRE WRAP .025 SQ.	TP1-9, CF-0	11			
ř.	104903 - 001	97	CLIP, JUMPER .025 SQ. POST	5C	2			

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ASSEMBLY PARTS LIST

S 7 0 1 1 M P 207066 — 001 F

19	PART NUMBER	NO.	DESCRIPTION	REMARKS	WHOLE DECIMAL	CODE
	101156 - 471	36	RESISTOR, 1/4w ±5% 470	r56,99	2	
M P	101156 - 511	37	RESISTOR, ½w ±5% 510	R34,35,49,50,51	5	
	101156 ⁻ 681	38	RESISTOR, 3w +5% 680	R7,10,58,61	4	
N P	101156 - 102	39	RESISTOR, 12w ±5% lK	R13,16,18,38,41,42, 47,55,87,89	10	
	101156 - 122	40	RESISTOR, ¼w ±5% 1.2K	R80	1	
ti P	101156 - 152	41	RESISTOR, ½w ±5% 1.5K	R69	1	
M P	101156 - 272	42	RESISTOR, 1/2W ±5% 2.7K	R97	1	
MF	101156 - 332	43	RESISTOR, ½w <u>+</u> 5% 3.3K	R73,74	2	
Mil.	101156 - 392	44	RESISTOR, ½w ±5% 3.9K	R98	1	
MP	101156 -472	45	RESISTOR, 1/2w +5% 4.7K	R57,59,60,79,81	. 5	
M P	101156 - 682	46	RESISTOR, ¼w ±5% 6.8K	R14,15,17,19,20	5	
MF	101156 - 103	4.7	RESISTOR, ¼w +5% 10K	R64,65,67,71,75,76,78, 86,88,92,93,96	. 12	
00 P 10 P	101156 - 203	48	RESISTOR, ¼w ±5% 20K	R43	1	
M P	101156 - 303	49	RESISTOR, ¼w ±5% 30K	R46		
	101156 - 333	50	RESISTOR, ½w <u>+</u> 5% 33K	R28,30	2	
	101156 -473	51	RESISTOR, 1/4w ±5% 47K	R91,94	2	
	101156 - 104	52	RESISTOR, 1/4W ±5% 100K	R63,66,72,77	4	
1	100155 - 181	53	RESISTOR, 1/4w ±1% 75	Rl	1	
1	100155 - 232	54	RESISTOR, 1/4W ±1% 255	R5	1	
	100155 - 254	55	RESISTOR, 1/4W ±1% 432	R8	1	
MP	100155 -289	56	RESISTOR, ¼w ±1% 1K	R29,39	2	
ORM 796	B (R 09/80)				PAGE	3 of 7

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ASSEMBLY PARTS LIST

S 7 0 1 1 M P 207066 - 001 F

deta	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	WHOLE	DECIMAL	U.M. CODE	
19 M.P.	100171 - 00 1	98	TY-RAP 1/16-11/2	Ј2	12	18		\dashv
M P	1010581 - 024	99	DIODE, ZENER 1N5225B	VR1	1			
i P	164021 - 926	100	WIRE, HOOKUP 26 AWG	CF2,	+-+		06	\dashv
M P	207066 - 100	101	ASSEMBLY DRAWING	CF2,		2	00	\dashv
10 B	207064 - 001		The state of the s		0			\dashv
u P		102	PRINTED MASTER		- 0		\vdash	\dashv
17.77.7.79	100377 - 002	113	PIN		2		\vdash	
M P	900908 - 001	114	TEST PROCEDURE	SELECT R45	0			_
W P								
M P		L			li			
мР								
мР								
MP								
M P	_							
ia P	_							
	-			,	1			\dashv
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N P							-	+
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ASSEMBLY PARTS LIST

S 7 0 1 1 207066 — 002 F

ASSY, PWB - MAIN - 90 IPS DSC: R Q120

10	PART NUMBER	ITEM NO.		DESCRIPTION			REMARKS	WHOLE	ANTITY DECIMAL	U.M.		Γ
	207066 - 200	1	SCHEMATIC					0	i		-	Γ
	207065 - 001	2	PROCESS BOA	RD			4 .	1				Γ
	207030 - 001	3	ASSY, PROM -	8 BIT MICROCOMPT	TE	R 3-40	3	1				
	123029 - 001	4	I.C. 74LS00			6E		1				Г
	123030 - 001	5	I.C. 74LS02			4D		1				Г
	123031 - 001	6	I.C. 74LS04			1B,	3B, 1D, 5D	4				r
	123123 - 001	. 7	I.C. 74LS09			2D		1				Γ
	123036 - 001	8	I.C. 74LS74			3D,6	5D,5E	3	1			Γ
	123038 - 001	. 9	I.C. 74LS86			7C		1				Γ
	123234 - 001	10	I.C. 74S240			2A		1				
	101139 - 001	. 11	I.C. 75451			2G		1				Γ
	101031 - 001	1,2	I.C. 75452			5Ba,	5Bb	2				
	100331 - 001	13	I.C. 7406			7D		1	1			Γ
	100234 - 001	14				4E		1				
PREPARE BY		3-5-8	895-1-971	12/14/82	F	12771/A	1 K. Karky 3/12/83	DWG RE	L NO.	DATE		-
DESIGN CHECKER		3/12/	14.11.00.00.	5 4/20 - 10.76.82		12728	R. Parky 5/6/83	8203		12		
ENGINEE	R			7. 7.01 8 31 82		12642	AK. Karle 2/8/83	NEXT AS		D D	LY	<u>×</u>
	1			Allucanit frysz	-	12636	M. Karker 3/7/83	MODELN	207358			_
	-		OI PL.RFL		В		R. H. Far 2/4/83	MODEL N	٠.			
			REV ECO	DATE / SIGNATURE	REV	ECO	DATE / SIGNATURE		0420-90			

PAGE 4 OF 7

4	Spransete, he.		ASSEMBLY PARTS LIST	S 7 0 1 1 M	P 207066 — 002 SEMBLY PARTS NUMBER
19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	WHOLE DECIMAL CODE
P	100155 - 347	57	RESISTOR, ¼w ±1% 4.02K	R40,44	2
P	100155 - 351	58	RESISTOR, W +1% 4.42K	R32,33	2
p	100155 - 385	59	RESISTOR, 1/2W ±1% 10K	R25,26,36,37,52	5
P	100155 - 415	60	RESISTOR, 1/2W +1% 20.5K	R53,95	2
é	100064 - 620	61	RESISTOR, ½w ±5% 62	R70	1
	142027 - 001	62	TERMINATOR-14 PIN 180/390 OHM	1A	1
p	142032 - 002	63	TERMINATOR-16 PIN 180/390 OHM	3A	1
ř	138002 - 104	64	POTENTIOMETER 1/2w, 100K	R27	1
P	138002 - 502	65	POTENTIOMETER 12w, 5K	R31	1
P	102768 - 225	66	CAP., TANT. 10v +20% 2.2uf	C28,38	2
	102871 - 225	67	CAP., TANT. 20v +20% 2.2uf	C34	1 1
Þ	102769 -475	6,8	CAP., TANT. 35v +20% 4.7uf	C32	
	102870 -685	69	CAP., TANT. 4v +20% 6.8uf	C11,13	2
P	102768 - 226	70	CAP., TANT. 10v <u>+</u> 20% 22uf	C35,51,52	3
	102667 -472	71	CAP., CER. 100v ±10% .0047uf	C37, 54	2
•	102667 - 102	72	CAP., CER. 100v <u>+</u> 10% .001uf	C43,46-49	5
	102665 - 104	73	CAP., CER. 50v -20+80% .luf	C1,5,7-10,12,14,15, 23-27,29-31,33,36	.23
Þ	_			C39-42	
9	102667 -104	74	CAP., CER. 100v +10% .luf	C44,45	2
	102673 - 479	75	CAP., CER. 100v <u>+</u> 10% 4.7pf	C50	1
ē	102669 - 200	76	CAP., CER. 100v +5% 20pf	C2.C53	2

ASSEMBLY PARTS LIST

WHOLE , DECIMAL CODE 123239 - 001 15 I.C. LM319 125011 - 001 16 I.C. LM339 125017 - 015 17 I.C. MA78L15 101032 - 001 18 I.C. NE592 5F,7F 146014 - 014 19 SOCKET, DIP - 14 CONTACTS 2B, 1A 146014 - 016 | 20 | SOCKET, DIP - 16 CONTACTS 146014 - 040 21 SOCKET, DIP - 40 CONTACTS 120909 - 003 22 HEADER, PROGRAM - DIP 151032 - 001 23 TRANSISTOR, PNP Q2T2905 151030 - 001 24 TRANSISTOR, NPN 2N3904 Q3-7 151033 - 001 | 25 | TRANSISTOR, NPN MM3007 Q1,2 107029 - 001 26 DIODE 1N4001 CR15 107201 - 001 27 DIODE 1N4150 CR1-14,CR18-25 107005 - 001 28 LED, INDICATOR MV5054-2 CR16 106500 - 114 29 CRYSTAL - 3.579545 MHz 101156 - 100 | 30 RESISTOR, 1/2W ±5% 10 R23,24 101156 - 330 31 RESISTOR, 1/3W ±5% 33 R48 100155 - 164 32 RESISTOR, w +5% 49.9 R4 101156 - 121 | 33 RESISTOR, W +5% 120 R2,3 2 101156 - 161 34 RESISTOR, 1/2W ±5% 160 R90 1 101156 - 221 35 RESISTOR, w ±5% 220 R54 1

al products, Inc.		ASSEMBLY PARTS LIST	S 7 0 1 1 M P 207066 — 002 F ASSEMBLY PARTS NUMBER	
DART NUMBER	ITEM	DESCRIPTION	REMARKS WHOLE DECIMAL U.M.	

	DA DT AV 14050	ITEM	DESCRIPTION	REMARKS	QUAN	DECIMAL U.M.	
19	PART NUMBER 28	NO.	DESCRIPTION	NEMANNS	12	DECIMAL CODE	
MP	102669 - 330	77	CAP., CER. 100v ±5% 33pf	C16,21,22	3		
M P	102669 - 101	81	CAP., CER. 100v ±5% 100pf	C20	1		
M P	102669 - 391	82	CAP., CER. 100v +5% 390pf	C18,19	2		
M P	102669 - 301	83	CAP., CER. 100v +5% 300pf	C17	1		owneste.
M.P.	122502 - 001	84	INDUCTOR 10uh <u>+</u> 5% 290ma	L7,8	2		
M P	122502 - 008	85	INDUCTOR 270uh ±5% 129ma	L3,4	. 2		
MP	122502 - 004	86	INDUCTOR 120uh +5% 124ma	L5,6	. 2		
MP	102002 - 001	87	BUS BAR - VERTICAL		1		
MP	100143 - 002	88	PAD, TRANSISTOR TO-5	Use with Q1, Q2			
M P	120905 -011	89	HEADER, DOUBLE ROW, STRAIGHT	5C	1		
MF	120916 - 001	90	HEADER, RIGHT ANGLE	J13	1		
M P	120916 - 002	91	HEADER, RIGHT ANGLE	J11,12	1		
M P	120915 - 024	92	HEADER, RIGHT ANGLE	J4-7	1		
M P	120915 -007	93	HEADER, RIGHT ANGLE	J3	1		
	105084 - 001	94	CONNECTOR-HOUSING, 4 PIN	Ј2	1		
	106019 - 001	95	CONTACT, PIN	Ј2	4		
	100360 004	96	PIN, WIRE WRAP .025 SQ.	TP1-9, CF-0			
1	104903 -001		CLIP, JUMPER .025 SQ. POST	5C	2		
0			TY-RAP 1/16-1½	J2	1		
	101058 024		DIODE ZENER 1N5225B	VR1			
a P	_	100			i		

S 7 0 1 1 M P 207066 — 002 F

ASSEMBLY PARTS LIST

S 7 0 1 1 M P 207066 - 002 F

	us po nevase e u, orre-		(CONTINUATION)			ANTITY	parama	enchiose e	-
19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	WHOLE 12	DECIMAL 18	CODE		L
A P	101156 - 471	36	RESISTOR, 12w ±5% 470	R56, 99	2				L
10	101156 - 511	37	RESISTOR, ¼w +5% 510	R34,35,49,50,51	5				L
g p	101156 - 681	38	RESISTOR, 1/4w +5% 680	R7,10,58,61	4				L
A P	101156 - 102	39	RESISTOR, w ±5% 1K	R13,16,18,41,42,47, 55,73,74,87,89	.11				L
A P	101156 — 122	40	RESISTOR, 1 +5% 1.2K	R80	. 1				L
u P	101156 - 152	41	RESISTOR, 1/4w ±5% 1.5K	R69	. 1				
ΜР	101156 - 272	42	RESISTOR, 1/2w ±5% 2.7K	R97	1				L
A P	101156 - 302	43	RESISTOR, 12w ±5% 3K	R38	1				
A P	101156 - 392	44	RESISTOR, 1/2w ±5% 3.9K	R98	1_				L
W P.	101156 - 472	45	RESISTOR, w ±5% 4.7K	R57,59,60,79,81	5				L
иΡ	101156 - 682	46	RESISTOR, w ±5% 6.8K	R14,15,17,19,20	. 5				L
a P	101156 - 103	47	RESISTOR, 🏧 ±5% 10K	R64,65,67,71,75,76,78, 86,88,92,93,96	. 1.2				L
W P	101156 — 203	48	RESISTOR, 1/2W ±5% 20K	R43	1				L
N P	101156 - 303	49	RESISTOR, ¼w ±5% 30K	R46	1				L
10	101156 - 333	50	RESISTOR, 1/4w +5% 33K	R28,30	2				L
10	101156 - 473	51	RESISTOR, w ±5% 47K	R91,94	2				L
1.5	101156 - 104	. 52	RESISTOR, 3w +5% 100K	R63,66,72,77	. 4				L
l P	100155 - 181	53	RESISTOR, 1/2W ±1% 75	Rl	1	-			L
4 6	100155 - 232	54	RESISTOR, 1/2 ±1% 255	R5	1				L
10	100155 - 254	55	RESISTOR, w ±1% 432	R8	1				L
a P	100155 - 289	56	RESISTOR, 1 ±1% 1K	R29,39	. 2			-	L
RM 7958	(R 09/80)					PAGE	3 0	F _ 7	T

BIDDES.	
	7

ASSEMBLY PARTS LIST

S 7 0 1 1 M P 207066 - 002 F

enveuve.	Apriducts, Inc.		(CONTINUATION)		QUA	NTITY	1100	MICHIGAN CO.
19	PART NUMBER 28	NO.	DESCRIPTION	REMARKS	WHOLE 12	NTITY DECIMAL 18	CODE	
MP	207066 - 100	101	ASSEMBLY DRAWING	1.34	. 0	1.77		
мР	207064 - 001	102	PRINTED MASTER		0			
d P	100377 - 002	113	PIN		2			
M P	900908 - 001	114	TEST PROCEDURE	SELECT R45	0			
u r	<u>-</u>							
N P	_							
W P	_							
d P								
A P	_							
A P	-	named out of the Street						
A P			THE RESERVE OF THE PARTY OF THE					
a P								
V P	_							
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4 0	-							
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A P								
RM 7968	B (R 09/80)					PAGE -	6 0	F

28b.

ion Grava EMBLY		MAIN -	30 IPS DSC:R 0120		52 20	07066 00	
19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	OU	DECIMAL CO	00 1
	207066 - 200	1	SCHEMATIC		. 0		
1	207065 - 001	2	PROCESS BOARD		1		
	940222 - 001	3	ASSY, 8 BIT MICROCOMPUTER (MASKED ROM VERSION)	3-4C (207030 - 002 Alternate)	1		\perp
	123029 - 001	4	I.C. 74LS00	6E	1		
	123030 — 001	5	I.C. 74LS02	4D	1		
	123031 — 001	6	I.C. 74LS04	1B, 3B, 1D, 5D	4		
	123123 - 001	7	I.C. 74LS09	20	1		
	123036 _ 001	8	I.C. 74LS74	3D, 6D, 5E	3		
	123038 _ 001	9	I.C. 74LS86	7C	1		
	123234 _ 001	10	I.C. 74S240	2A	. 1		
	101139 _ 001	11	I.C. 75451	2G	1		
	101031 - 001	12	I.C. 75452	58a, 58b	. 2		
	100331 - 001	13	I.C. 7406	7D	1		
	100234 — 001	14	I.C. 9602	4E	1		
REPAREL	Sue Redmond	7-9-	82 E 12728 & Deput 2 483		DWG RE		ATE
HECKED	Kam Makhawi	7/14/			82042		15 8 2
DESIGN NGINEEF	R. Bukan	11/11		119006 111	NEXT ASS		
			7,7,7,5	3044 4 / Buly 1/23/83	MODELN		
			A REL 114/8 - F I	771/A & K./aller 8/12/83	04	20-30	

(B/D)			ASSEMBLY PARTS LIST	S 7 0 1 1	207066 -	- 003	G
Garden Grove	Obviolom		(CONTINUATION)		QUANTITY		
19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	WHOLE DECIMAL	U.M. CODE	
1	123239 - 001	15	I.C. LM319	7E	1		_
N/O	125011 - 001	16	I.C. LM339	6C	. 1		
	125017 — 015	17	I.C. MA78L15	4B	1	1 2 2	
	101032 - 001	18	I.C. NE592	5F, 7F	2		
11.5	146014 014	19	SOCKET, DIP - 14 CONTACTS	2B, 1A	2	1	_
11.1	146014 _ 016	20	SOCKET, DIP - 16 CONTACTS	3A	1		
M P	146014 - 040	21	SOCKET, DIP - 40 CONTACTS	3-4C		11	_
M P	120909 - 003	22	HEADER, PROGRAM - DIP	2B	1	1_1	_
	151032 - 001	23	TRANSISTOR PNP Q2T2905	2E	1		\perp
	151030 - 001	24	TRANSISTOR NPN 2N3904	03-7	. 5		_
(1)	151033 001	25	TRANSISTOR NPN MM3007	01,2	2		
	107029 - 001	26	DIODE 1N4001	CR15	1	1	
	107201 - 001	27	DIODE 1N4150	CR1-14, CR18-25	22	$\perp \perp$	_
	107005 - 001	28	LED, INDICATOR MV5054-2	CR16	1		
1	106500 - 114	29	CRYSTAL - 3.579545 MHz	γ1	1	1	_
	101156 — 100	30	RESISTOR, www ±5% 10	R23,24	2		
	101156 — 330	31	RESISTOR, ¼w ±5% 33	R48	1		_
Y.	100155 164	32	RESISTOR, w ±5% 49.9	R4	1		_
61 P	101156 — 121	33	RESISTOR, 🐲 ±5% 120	R2,3	2		
FORM 785 (F	(03/82) (Continuation)				PAGE	2 00	. 7

61/1	her.			ASSEMBLY PARTS LIST	S 7 0 1 1		07066 -			Ĝ
Gordon Gr	ove Division			(CONTINUATION)			MITITY I			election in
19	PART N	JMBER 28	NO.	DESCRIPTION	REMARKS	WHOLE I	DECIMAL 18	U.M. CODE		_
7.8	101156	- 161	34	RESISTOR, Www ±5% 160	R90	1				_
	101156	- 221	35	RESISTOR, kw +5% 220	R54	1				_
	101156	— 471	36	RESISTOR, kw ±5% 470	R56,99	2				_
(Tr	101156	56 — 511		RESISTOR, 🖢 ±5% 510	R34,35,49,50,51	5				_
Ψ,	101156	11156 — 681		RESISTOR, ½w ±5% 680	R7,10,58,61	4				<u>_</u>
M	101156	_ 102	39	RESISTOR, ¼w ±5% 1K	R13,16,18,38,41,42, 47,55,87,89	. 10				_
W F.	101156	- 122	40	RESISTOR, Ww +5% 1.2K	R80	1				_
M	101156	_ 152	41	RESISTOR, 1 _{aW} ±5% 1.5K	R69	1				L
М	101156	_ 272	42	RESISTOR, ¼w ±5% 2.7K	R97	1				L
Mr F	101156	_ 332	43	RESISTOR, Www ±5% 3.3K	R73,74	2				L
10	101156	392	44	RESISTOR, ¼w ±5% 3.9K	R98	1				L
M P	101156	_ 472	45	RESISTOR, www ±5% 4.7K	R57,59,60,79,81	5				L
	101156	682	46	RESISTOR, ¼w ±5% 6.8K	R14,15,17,19,20	5				L
	101156	- 103	47	RESISTOR, ¼w ±5% 10K	R64,65,67,71,75,76,78, 86,88,92,93,96	. 12				L
115	101156	- 203	48	RESISTOR, Ww +5% 20K	R43	1				L
M. T	101156	- 303	49	RESISTOR, 1 _{3W} ±5% 30K	R46	1				L
M	101156	- 333	50	RESISTOR, ¼w ±5% 33K	R28,30	2				L
M P	101156	_473	51	RESISTOR, ¼w ±5% 47K	R91,94	2			-	L
MP	101156	_ 104	52	RESISTOR, ½w ±5% 100K	R63,66,72,77	4				L
FORM 798	(R 03/82) (Cont	tinuation)					PAGE _	3 0	F 7	_

dendan Gro	p Division	· · · · · ·	ASSEMBLY PARTS LIST	ASSEMBLY PART NUMBER QUANTITY U.M.					
19	PART NUMBER 28	ITEM NO.	DESCRIPTION	REMARKS	WHOLE DECIMAL	CODE	_		
9.7	100155 — 181	53	RESISTOR, ¼w ±1% 75	RI	1		_		
	100155 — 232	. 54	RESISTOR, ¼w <u>+</u> 1% 255	R5 · ·	1		4		
3 -7	100155 _ 254	55	RESISTOR, 🍇 <u>+</u> 1% 432	R8	1		_		
M P	100155 _ 289	56	RESISTOR, ¼w ±1% 1K	R29,39	2				
M P	100155 _ 347	57	RESISTOR, 1/4W ±1% 4.02K	R40,44	2		\perp		
M P	100155 — 351	58	RESISTOR, ½w ±1% 4.42K	R32,33	2		\perp		
M P	100155 - 385	59	RESISTOR, ¼w ±1% 10K	R25,26,36,37,52	5		\perp		
M P	100155 - 415	60	RESISTOR, ¼w ±1% 20.5K	R53,95	2				
M P	100064 - 620	61	RESISTOR, ½w +5% 62	R70	1		1		
M P	142027 - 001	62	TERMINATOR - 14 PIN 180/390 OHM	1A	1		_		
MP	142032 — 002	63	TERMINATOR - 16 PIN 180/390 OHM	3A	1				
M P	138002 — 104	64	POTENTIOMETER 18W 100K	R27	1				
мР	138002 - 202	65	POTENTIOMETER 32W 2K	R31	1		_		
M P	102768 — 225	66	CAP., TANT. 10v <u>+</u> 20% 2.2uf	C28,38	2		4		
МΡ	102871 — 225	67	CAP., TANT. 20v <u>+</u> 20% 2.2uf	C34	1		_		
M P	102769 — 475	68	CAP., TANT. 35v <u>+</u> 20% 4.7uf	C32	1				
M P	102870 — 685	69	CAP., TANT. 4v <u>+</u> 20% 6.8uf	C11,13	2				
M P	102768 _ 226	70	CAP., TANT. 10v <u>+</u> 20% 22uf	C35,51,52	3				
M P	102667 _ 472	71	CAP., CER. 100v +10% .0047uf	C37, 54	2				

4/4	dete.L.		ASSEMBLY PARTS LIST	S 7 0 1 1 M	207066 -		G
19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	QUANTITY WHOLE DECIMAL	U.M. CODE	
y P	102667 - 102	72	CAP., CER. 100v +10% .001uf	C43,46-49	5		
M P	102665 - 104	73	CAP., CER. 50v -20+80% .luf	C1,5,7-10,12,14,15, 23-27,29-31,33,36,39-42	23		
a P	102667 — 104	74	CAP., CER. 100v +10% .luf	C44,45	2		
4 1	102673 — 479	75	CAP., CER. 100v ±10% 4.7pf	C50	1		
M P	102669 — 200	76	CAP., CER. 100v ±5% 20pf	C2	1		
M P	102669 — 330	77	CAP., CER. 100v <u>+</u> 5% 33pf	C16	1		
W P	102669 - 620	78	CAP., CER. 100v <u>+</u> 5% 62pf	C53	1		_
M P	102669 — 101	79	CAP., CER. 100v ±5% 100pf	C22	1		
M P	102669 131	80	CAP., CER. 100v <u>+</u> 5% 130pf	C21	1		
M P	102669 — 301	81	CAP., CER. 100v <u>+</u> 5% 300pf	C20	1	$\perp \perp$	_
M P	102669 — 122	82	CAP., CER. 100v ±5% 1200pf	C18,19	2	\perp	
MP	102669 — 302	83	CAP., CER. 100v <u>+</u> 5% 3000pf	C17	1		
M P	122502 — 001	84	INDUCTOR, 10uh ±5% 290ma	L7,8	2		
μР	122502 — 010	85	INDUCTOR, 820uh <u>+</u> 5% 77ma	L3,4	2		
4 P	122502 _ 009	86	INDUCTOR, 360uh <u>+</u> 5% 108ma	L5,6	2		
M P	102002 _ 001	87	BUS BAR - VERTICAL		1		
M P	100143 002	88	PAD, TRANSISTOR TO-5	Use with Q1, Q2	2		
M P	120905 _ 011	89	HEADER, DOUBLE ROW, STRAIGHT	5C .	1		
M P	120916 _ 001	90	HEADER, RIGHT ANGLE	J13	1		

Garden Grove	Division			ASSEMBLY PARTS LIST			SLY PART N	JMBER		
19	PART NUMB	ER 28	ITEM NO.	DESCRIPTION	REMARKS	QUA WHOLE	WHOLE DECIMAL			I
M P	120916 -	- 002	91	HEADER, RIGHT ANGLE	J11,12	1				1
M P	120915 -	- 024	92	HEADER, RIGHT ANGLE	J4-7	1				L
MP	120915 -	- 007	93	HEADER, RIGHT ANGLE	J3	1				ļ
M P.	105084 -	- 001	94	CONNECTOR-HOUSING, 4 POS.	J2	1				L
M P	106019 -	- 001	95	CONTACT-PIN	J2	4				1
M P	100360	_ 004	96	PIN, WIRE WRAP .025 SQ.	TP1-9, CF-0	3.1				L
M P	104903	_ 001	97	CLIP, JUMPER .025 SQ. POST	5C	2				1
M P	100171 -	- 001	98	TY-RAP 1/16-1⅓	J2	1				1
мР	101058 -	- 024	99	DIODE, ZENER 1N5225B	VR1	1				1
MP	164021 -	926	100	WIRE, HOOKUP 26 AWG	CF2		2	06		1
M P	207066 -	- 100	101	ASSEMBLY DRAWING		0				1
MP	207064	- 001	102	PRINTED MASTER		0			-	1
M P	100377 -	- 002	113	PIN		2				1
M P	900908 -	- 001	114	TEST PROCEDURE	SELECT R45	0				1
M P	-									1
M P	-	-								1
M P	-	-								1
M P	-	_							L	
MP	_	_					1			-

ASSEMBLY PARTS LIST 207066 — 004 G

ASSEMBLY PART NUMBER

OUANTITY
WHOLE 1 DECIMAL
CODE DSC: R DOC CODE: Q120 S 7 0 1 1 ASSY, PWB - MAIN - 90 IPS DESCRIPTION REMARKS PART NUMBER 1 SCHEMATIC 207066 - 200 2 PROCESS BOARD 207065 - 001 3 ASSY , 8 BIT MICROCOMPUTER (MASKED ROM VERSION) 3-4C (207030 -002 Alternate) 940222 - 001 4 I.C. 74LS00 6E 123029 - 001 5 I.C. 74LS02 4 D 123030 - 001 1B,3B,1D,5D 6 I.C. 74LS04 123031 _ 001 2 D 123123 _ 001 7 I.C. 74LS09 3D,6D,5E 123036 _ 001 8 I.C. 74LS74 7 C 9 I.C. 74LS86 123038 _ 001 2A 123234 _ 001 10 I.C. 74S240 2 G 11 I.C. 75451 101139 _ 001 5Ba, 5Bb 12 I.C. 75452 101031 _ 001 7 D 100331 _ 001 13 I.C. 7406 14 I.C. 9602 100234 _ 001 Sue Redmond NTE 7-13-82 E 12728 & L. Bulgar 4/4/23
Van Makhan 1/4/8 3 D 12642 & L. Bulgar 4/4/23
D) Hotellon 1/11/8 3 C 12636 & L. Bulgar 2/1/8/3 820430 | 04 8 3 M M D D Y Y B 12631 | L/d. Ka. 2/1/83 | C 12044 | Graff | Graff | C 1268 |

A PROD. | State | F 1277 | A | L/d. | M/d/83 |

REV ECO DATE / SIGNATURE | REV ECO DATE / SIGNATURE 207358 0420-90

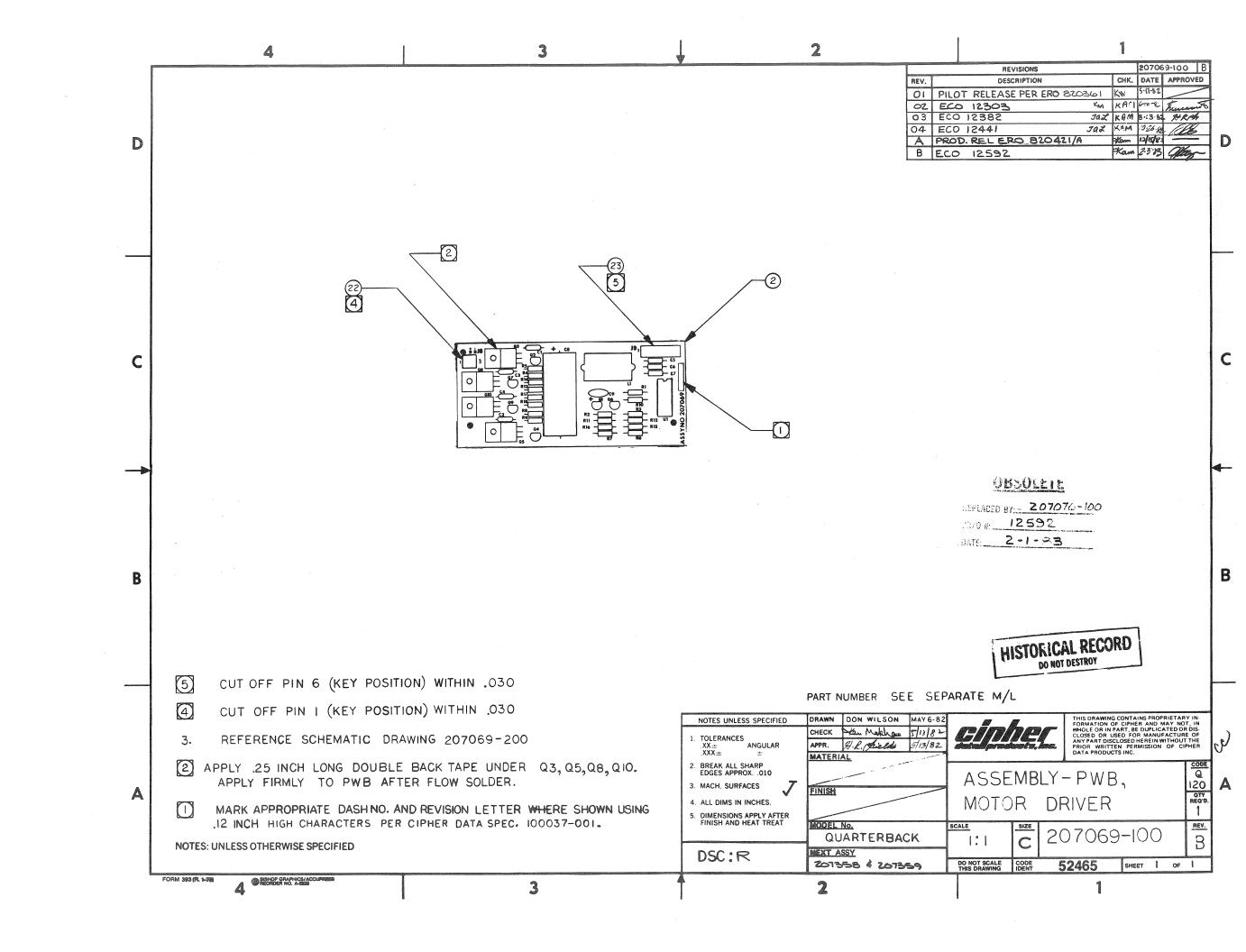
	BFV G	GIDDLE C. Salakija nakabita, koz. Garden Grove Division		ASSEMBLY PARTS LIS	S 7 0 1 1 M	ASSEMBLY PART NU	004	Ğ
NTITY U.M. DECIMAL CODE	一	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	QUANTITY WHOLE DECIMAL 12 18	U.M. CODE	
18 CODE	+	M P 123239 — 001	15	I.C. LM319	7E	1		\perp
	+H	M P 125011 - 001	16	I.C. LM339	6C	1		
	+H	M.P 125017 _ 015	17	I.C. MA78L15	48	1		L
	-H	M P 101032 _ 001	18	I.C. NE592	5F,7F	2		
	-H	M P 146014_ 014	19	SOCKET, DIP - 14 CONTACTS	2B,1A	2		
		M P 146014_ 016	20	SOCKET, DIP - 16 CONTACTS	3A	1		
	-H	M P 146014 _ 040	21	SOCKET, DIP 40 CONTACTS	3-4C	1		Ι
	-H	M P 120909 _ 003	22	HEADER, PROGRAM - DIP	28	1		
	+	M P 151032 _ 001	23	TRANSISTOR, PNP Q2T2905	2E	1		
	-H	M P 151030 _ 001	24	TRANSISTOR, NPN 2N3904	Q3-7	5		
	-H	M P 151033 _ 001	25	TRANSISTOR, NPN MM3007	01,2	2		
		M P 107029 _ 001	26	DIODE 1N4001	CR15	1	1 2 2	
	-H	M P 107201 - 001	27	DIODE 1N4150	CR1-14, CR18-25	22		
	-H	M P 107005 - 001	28	LED, INDICATOR MV5054-2	CR16	1		
NO. DATE	Щ.	M.P. 106500 _ 114	29	CRYSTAL - 3.579545 MHz	Y1	1		
30 1 04	83	M P 101156 _ 100	30	RESISTOR, 1/4W ±5% 10	R23,24	2		
M M D D		M P 101156 _ 330	31	RESISTOR, 1/4W ±5% 33	R48	1		
207358		M P 100155 - 164	32	RESISTOR, 1/4W ±5% 49.9	R4	1		
0420-90	.	M P 101156 _ 121	33	RESISTOR, 1/4W ±5% 120	R2,3	2		
PAGE 1	of	FORM 795 (R 03/82) (Continuation)				PAGE _	2 of _	7

Sarden Grov	re Otylelen		(CONTINUATION)			paramontary s	anaman)
19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	QUANTITY WHOLE DECIMAL 12 18	U.M. CODE	
W P	101156- 161	34	RESISTOR, 1/4W <u>+</u> 5% 160	R90	1		_
4 "	101156- 221	35	RESISTOR, 1/4W <u>+</u> 5% 220	R54	1		_
M P	101156- 471	36	RESISTOR, 1/4W <u>+</u> 5% 470	R56,99	2		_
мР	101156 - 511	37	RESISTOR, 1/4W <u>+</u> 5% 510	R34,35,49,50,51	5		
M P	101156 - 681	38	RESISTOR, 1/4W <u>+</u> 5% 680	R7,10,58,61	4		
M P	101156_ 102	39	RESISTOR, 1/4W <u>+</u> 5% 1K	R13,16,18,41,42,47, R55,73,74,87,89	11	\sqcup	
M P	101156 - 122	40	RESISTOR, 1/4W <u>+</u> 5% 1.2K	R80	1		
MP	101156 - 152	41	RESISTOR, 1/4W ±5% 1.5K	R69	1		
мР	101156 _ 272	42	RESISTOR, 1/4W ±5% 2.7K	R97	1		
M P	101156 - 302	43	RESISTOR, 1/4W <u>+</u> 5% 3K	R38	1		
M P	101156 _ 392	44	RESISTOR, 1/4W <u>+</u> 5% 3.9K	R98	1		_
M P	101156 _ 472	45	RESISTOR, 1/4W ±5% 4.7K	R57,59,60,79,81	5		
M P	101156 - 682	46	RESISTOR, 1/4W <u>+</u> 5% 6.8K	R14,15,17,19,20	5	\sqcup	
M P	101156 - 103	47	RESISTOR, 1/4W ±5% 10K	R64,65,67,71,75,76,78 R86,88,92,93,96	12		
M P	101156 - 203	48	RESISTOR, 1/4W <u>+</u> 5% 20K	R43	1		
M P	101156 - 303	49	RESISTOR, 1/4W <u>+</u> 5% 30K	R46	1		
M P	101156 - 333	50	RESISTOR, 1/4W <u>+</u> 5% 33K	R28,30	2		
M P	101156 _ 473	51	RESISTOR, 1/4W ±5% 47K	R91,94	2	\sqcup	
MP	101156 - 104	52	RESITOR, 1/4W +5% 100K	R63,66,72,77	4		

lpher.		ASSEMBLY PARTS LIST	S 7 0 1 1 M P	207066 — ASSEMBLY PART NO	
PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	QUANTITY WHOLE DECIMAL	U.M. CODE
100155 — 181	53	RESISTOR, 1/4W +1% 75	R1	1	
100155- 232	54	RESISTOR, 1/4W ±1% 255	R5	1	
100155- 254	· 55	RESISTOR, 1/4W ±1% 432	R8	1	
100155 - 289	56	RESISTOR, 1/4W <u>+</u> 1% 1K	R29,39	2	
100155 - 347	57	RESISTOR, 1/4W ±1% 4.02K	R40,44	2	
100155_ 351	58	RESISTOR, 1/4W ±1% 4.42K	R32,33	2	
100155_ 385	59	RESISTOR, 1/4W ±1% 10K	R25,26,36,37,52	5	
100155 _ 415	60	RESISTOR, 1/4W ±1% 20.5K	R53,95	2	
100064_ 620	61	RESISTOR, 1/2W ±5% 62	R70	1	
142027 _ 001	62	TERMINATOR - 14 PIN 180/390 OHM	1A	1	
142032 _ 002	63	TERMINATOR - 16 PIN 180/390 OHM	3A	1	
138002_ 104	64	POTENTIOMETER 1/2W, 100K	R27	1	
138002 - 502	65	POTENTIOMETER 1/2W, 5K	R31	1	
102768 _ 225	66	CAP., TANT. 10v <u>+</u> 20% 2.2uf	C28,C38	2	
102871_ 225	67	CAP., TANT. 20v <u>+</u> 20% 2.2uf	C34	1	
102769 _ 475	68	CAP., TANT. 35v <u>+</u> 20% 4.7uf	C32	1	
102870_ 685	69	CÁP., TANT. 4v <u>+</u> 20% 6.8uf	C11,13	2	
102768 _ 226	70	CAP., TANT. 10v <u>+</u> 20% 22uf	C35,51,52	3	
102667 - 472	71	CAP., CER. 100v ±10% .0047uf	C37, 54	2	

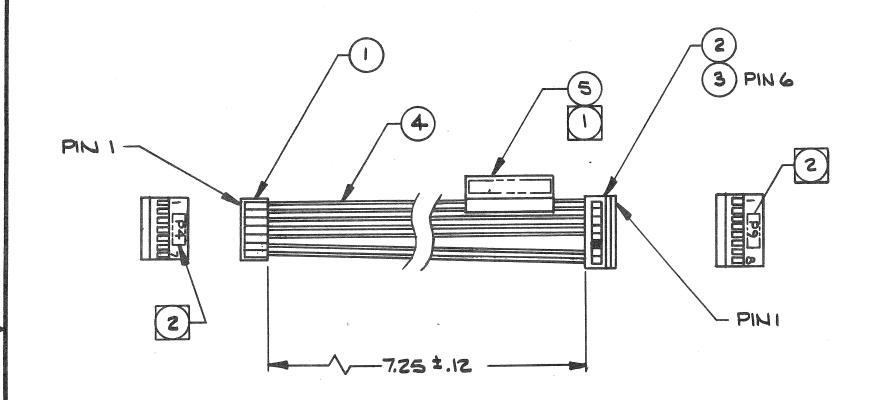
51/11	Distriction		ASSEMBLY PARTS LIST	S 7 0 1 1 M P	207066 -		
	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	QUANTITY WHOLE DECIMAL 12	U.M. CODE	
M P	102667 - 102	72	CAP., CER. 100v +10% .001uf	C43,46-49	5		
y P	102665 _ 104	73	CAP., CER. 50v -20+80% .1uf	C1,5,7-10,12,14,15, 23-27,29-31,33,36,39-	2 23		
W P	102667 - 104	7.4	CAP., CER. 100v +10% .1uf	C44,45	2		_
M P	102673 - 479	75	CAP., CER. 100v ±10% 4.7pf	C50	1		
M P	102669 - 200	76	CAP., CER. 100v ±5% 20pf	C2,C53	2		_
M P	102669 - 330	77	CAP., CER. 100v +5% 33pf	C16,21,22	3		
M P	102669 - 101	81	CAP., CER. 100v +5% 100pf	C20	1		
M P	102669 - 391	82	CAP., CER. 100v <u>+</u> 5% 390pf	C18,19	2	44	
M P	102669 - 301	83	CAP., CER. 100v <u>+</u> 5% 300pf	C17	1		
M P	122502 - 001	84	INDUCTOR 10uh ±5% 290ma	L7,8	2		
MP	122502 - 008	85	INDUCTOR 270uh <u>+</u> 5% 129ma	L3,4	2		
N P	122502 - 004	86	INDUCTOR 120uh <u>+</u> 5% 124ma	L5,6	2		
11 (102002 - 001	87	BUS BAR - VERTICAL		1		
4.0	100143 - 002	88	PAD, TRANSISTOR TO-5	Use with Q1,Q2	2		
	120905 - 011	89	HEADER, DOUBLE ROW, STRAIGHT	5C	1		
N.	120916 - 001	90	HEADER, RIGHT ANGLE	J13	1	$\bot \bot$	_
4 P	120916 - 002	91	HEADER, RIGHT ANGLE	J11,12	1		
11 (120915 _ 024	92	HEADER, RIGHT ANGLE	J4-7	1	$\bot \bot$	_
	120915 _ 007	93	HEADER, RIGHT ANGLE	J3	1		

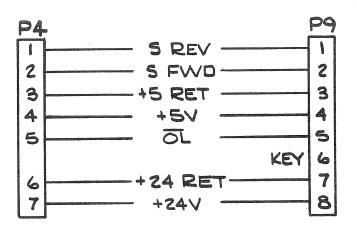
arden Grovo	Division		ASSEMBLY PARTS LIST			ASSEM	NTITY		normen.
19	PART NUMBER	ITEM NO.	DESCRIPTION		REMARKS	WHOLE		U.M. CODE	
4 P	105084- 001	94	CONNECTOR-HOUSING, 4 PIN	J2		1			
V P	106019 - 001	95	CONTACT, PIN	J2		4			
V.P	100360 - 004	96	PIN, WIRE WRAP .025 SQ.	TP1-9,	CF-0	11			
VI P	104903 _ 001	97	CLIP, JUMPER .025 SQ. POST	5 C		2			
VI P	100171 _ 001	98	TY-RAP 1/16-1 1/4	J2 ;		1			
A P	101058 - 024	99	DIODE, ZENER 1N5225B	VRl		1	1		
vi P	_	100							
и Р	207066 _ 100	101	ASSEMBLY DRAWING			0			
W.P.	207064_ 001	102	PRINTED MASTER			0		$\perp \perp$	
A P	100377 - 002	113	PIN			. 2	!		
W P	900908 - 001	114	TEST PROCEDURE	SELECT	r R45	0			
W P									
W P	_							1	
V P	-							\perp	<u> </u>
A P							-		
A P									<u> </u>
A P									_
VI P	·								
u P	and the second s						Ì		



ASSY, PWB-MC	ITEM NO.	DESCRIPTION	REMARKS	ASSEMBLY PART NUMBER OUANTITY WHOLE DECIMAL CODE	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	WHOLE	DECIMAL	COL
PART NUMBER	NO.	DESCRIPTION	Newstrad	18 CODE	_	15					T
207068 — 001	1	PROCESS BOARD	_		102608 108	16	CAP, ELEC 35V-10% + 50% 1000uf	C8	1		L
700336 - 001					102665_104	17	CAP, CER. 50V-20 + 80% .luf	C5,C6,C7	3		L
	-3	1.0. /430	<u>OBSOLETE</u>		102667103	18	CAP, CER. 100V + 10% .01uf	C1,C2,C3,C4	4		Γ
151027 002		TRANSISTOR, NPN TIP120 REPLACE	D BY:- 207076-001		_	19					Γ
151028 _ 002		TRANSISTOR, PNP TIP125 CR/O #:	12592		122522_001	20	INDUCTOR, HIGH CURRENT FILTER ± 10% 100uh	L1	1		Γ
151030 _ 001	7	TRANSISTOR, NPN 2N3904 DATE:	2-1-83		_	21					I
151031 _ 001	, a	TRANSISTOR, PNP 2N3906		2	120917003	22	HEADER, STRAIGHT 3-PIN	J8	1		
	-	1.02.02.00.00, 1.02.00.00	1		120917_008	23	HEADER, STRAIGHT 8-PIN	J9	1		L
101156 101	10	RESISTOR, WW + 5% 100	R5,R9,R14,R18		-	24					L
101156 — 561	 	RESISTOR, %W + 5% 560	R7,R16	2	150107001	25	TAPE, DOUBLE COATED POLYURETHANE FOAM	03,05,08,010	1		0
101156 — 361	+	RESISTOR, WW + 5% 3.9K	R1,R2,R6,R10,R11,R15		207069 _200	26	SCHEMATIC	REF	٥	<u> </u>	\perp
101156 - 682		RESISTOR, WW + 5% 6.8K	R4,R8,R13,R17		207069 100	27	ASSY. DWG	REF	0	<u> </u>	\perp
101156 — 103	+	RESISTOR, WW + 5% 10K	R3,R12		207067 7001	28	MASTER ARTWORK	REF		<u> </u>	\perp
		-82 04 12494 L. Karley "1981		DWG REL NO. DATE		29			ļ	-	\perp
inal land	14/6/	P = 103 12441 1 1 15 1076-62	a la Para R. Oll. 1013	820361051482		30					\perp
Merino	5/13/	182 02 12382 3.74. Lields 8.13.82 01, 12303 fotherant 6-70-72	ELO TENDA	NEXT ABSEMBLY - 207358, 207359		31				ļ	\perp
	\vdash	OI PIL. REL	A PROD.	MODEL NO.		32				-	1
		REV ECO DATE/SIGNATURE	EV ECO DATE/SIGNATURE	QUARTERBACK	<u> </u>	33				1	

	REVISIONS		2070	70-100 A
RE	DESCRIPTION	CHK.	DATE	APPROVED
0	PILOT REL PER ERO 670368	KAM		
A	PROD. REL ERO 820421/A	Hom	12/14/82	





PART NUMBER SEE SEPARATE M/L

- MARK CONNECTORS WITH APPROPRIATE REF DESIGNATION USING .12 HIGH WHITE CHARACTERS PER CDP SPEC 100013-001.
- MARK WITH PART NO., APPROPRIATE DASH NO. \$
 LATEST REVISION LEVEL PER CDP SPEC 100037-001.

NOTES: UNLESS OTHERWISE SPECIFIED

•	, , , , , , , , , , , , , , , , , , , ,	OWINGEL C								
NOTES UNLESS SPECIFIED	DRAWN	A STATE OF THE PARTY OF THE PAR	5 24 82	ein	Ba	•	MARCHON AS	NAMING CON	Lace aban bar	AV MEDT. EN ES
1. TOLERANCES	CHECK	Ham Makhawi	6/1/87				WHOLE	or in part Edorused F	BE DUPLIC ORMANUFA	CTURE OF
.XX± ANGULAR	appr.	9 Para	114/82	6°°	And the street of the street	**************************************	PRIOR W	T DISCLOSED RITTEN PERM ODUCTS, INC.	ISSION OF T	HE CIPHER
.XXX ± = = =	MATERIA	AL,		Garden Grov	e Divisio	n -	DAIATA	000016, 440		
2. BREAK ALL SHARP EDGES APPROX010				1	-		A	0T 6		3015
3. MACH. SURFACES	FINISH				9	ABLE-				917
4. ALL DIMS IN INCHES.				DRIVE	R	PWB,	90) IP	S	1
5. DIMENSIONS APPLY AFTER										
FINISH AND HEAT TREAT	MODEL	No. QB		SCALE	SIZE		Street No.	1 -		EW.
		QD		1/1	8	2070	IC)- IC		IAI
DSC:R	NEXT_A	SSY		,	GARGINA P					
D3C. K				DO NOT SCALE THIS DRAWING	CODE			SHEET	/ OF	1



					5	52		61	
5	7	0	1	1	44.9	Γ	207070 -001		Å
_		_	_		ASSE	ME	LY PARTS NUMBER		

207358 0420-30

PAGE 1 OF ____

Q115 DSC:R ASSY, CABLE - MOTOR DRIVER PWB, 90 IPS DESCRIPTION REMARKS PART NUMBER 105081 - 607 1 CONNECTOR HSG - 7 POS. P4 2 CONNECTOR HSG - 8 POS. **P**9 105081 - 608 1 3 KEY, CONNECTOR HSG 26 AWG WHITE 56 100053 - 926 4 WIRE, HOOKUP 133500 - 001 5 CABLE MARKER 207070 - 100 6 ASSY DWG PREFORED T. SCOTT 5-24-82

CHECKED S. MAKAM 5/24/82 A 820/34/A 15/14/82

DESIGN J. 1.4.

CHICKED S. MAKAM 5/24/82 A 820/34/A 15/14/82

DESIGN J. 1.4.

CHICKED S. MAKAM 5/24/82 A 820/34/A 15/14/82

DESIGN J. 1.4.

CHICKED S. MAKAM 5/24/82 A 820/34/A 15/14/82

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CHICKED S. MAKAM 5/24/82 A 820/34/A 15/14/82

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CHICKED S. MAKAM 15/24/82

DESIGN J. 1.4.

CHICKED S. MAKAM 15/24/82

CHICKED S. MAKAM 15/24/82

DESIGN J. 1.4.

CHICKED S. MAKAM 15/24/82

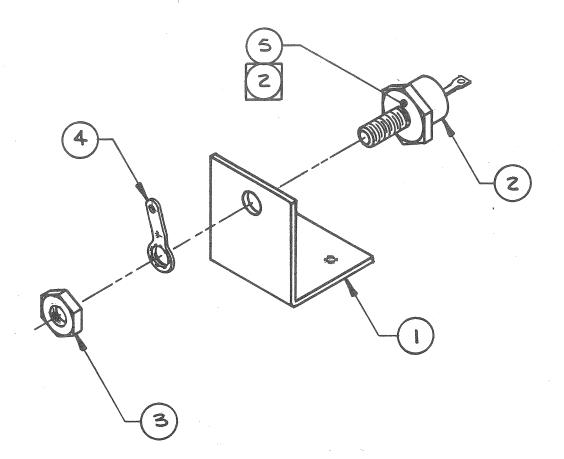
CHI 820368 06 04 82 NEXT ASSEMBLY

31b.

REVISIONS 7207072-100 A
REV. DESCRIPTION CHK. DATE APPROVED

O1 PILOT REL PER ERO 820368 KAM ______

A PROD. REL ERO 820421/A Kam 12/14/82



PART NUMBER SEE SEPARATE M/L

- 2 APPLY ITEM 5 (THERMAL COMPOUND) TO BASE OF ITEM 2 (DIODE) BEFORE INSTALLATION.
- 1. BAG & TAG PART NO., APPROPRIATE DASH NO. &
 LATEST REVISION LEVEL PER CDP SPEC
 100037-001.

NOTES: UNLESS OTHERWISE SPECIFIED

NOTES UNLESS SPECIFIED	DRAWN MATTHES S/26/82	I ARTHY MIGHT ANNY ANNY INSIS	her	THIS DRAWING CONTAINS PROPRIETARY INFORMATION OF CIPHER AND MAY NOT, IN
1. TOLERANCES	CHECK Plan Machani 6/1/82	alestera pro	ducts,inc.	WHOLE OR IN PART BE DUPLICATED OR DISCLOSED OR USED FORMANUFACTURE OF ANY PART DISCLOSED HEREIN WITHOUT THE
.XX± — ANGULAR .XXX± — ± —	MATERIAL MATERIAL	Garden Grov	e Division	PRIOR WRITTEN PERMISSION OF THE CIPHER DATA PRODUCTS, INC.
2. BREAK ALL SHARP EDGES APPROX010		ASSY	DIODE	- SLOW Q
3. MACH. SURFACES — J	FINISH		ED MOT	
4. ALL DIMS IN INCHES.			30 IP	2 REQT.
5. DIMENSIONS APPLY AFTER				
FINISH AND HEAT TREAT	And a section of the	SCALE	SIZE	ASV.
	QB	1/1	B 2070	72-100 A
DSC: R	NEXT_ASSY	`		
000.11		DO NOT SCALE THIS DRAWING	CODE	SHEET · \ OF

32.



S 7 0 1 1 207072-001 A

ASSEMBLY TIVLE

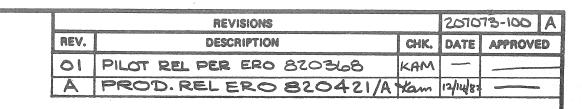
ASSY, DIODE - MOTOR DRIVER, 30 IPS

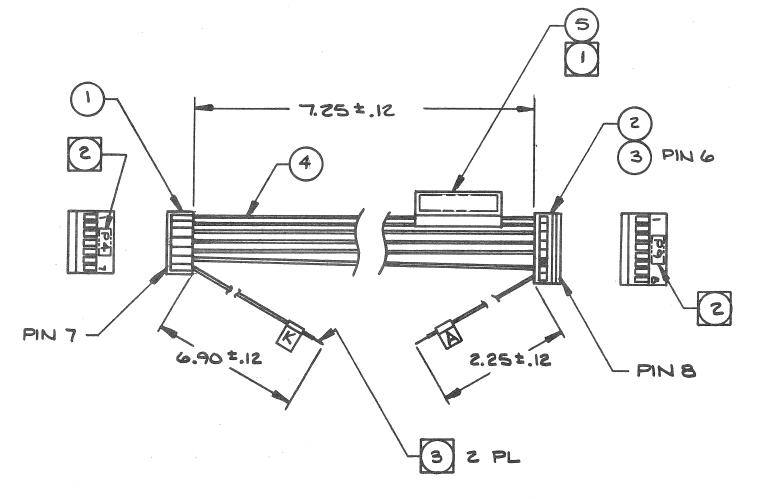
DSC:R

Q100

19	PART NUMBER	ITEM NO.	Dela Marie de la Constantina del Constantina de la Constantina del Constantina de la	POLICE	C	DESCRIPTION		,	REMARKS	QU WHOLE 12	DECI	MAL 18	U.M. CODE		Ι
	207318 - 001	1	HEA	TSI	NK - S	ZENER DIODE				1					L
	107044 - 001	2	DIO	DE,	ZENEI	R 10w 1N3998				1					
	136004 - 500	3	NUT	, F	EX MA	CH		#10		1					l
	150527 - 001	4	TER	MIN	AL - 1	LOCKING LUG				1					
	120100 - 001	5	THE	RM	L COM	POUND				A/R					1
	207072 - 100	. 6	ASS	Υſ	WG					0	ļ !				L
P						-									
1															Ī
7															T
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	<u>*****</u>														T
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	<u></u>								***					-	T
REPARED	T. Scott	DATE 5-20	4-82				T	1		DWG RI	L NO.		DATE		ndon
HECKED		5/24								8203	පිථ	06	04	8	z
DESIGN NGINEER		6/14/		Α	ERO	Yem 12/14/82	-			NEXT AS	SEMBLY	M M	D D	IY	_
	1. 3				PROD.							7359			
				01	PILOT	<u>k</u> ———				MODEL	ō.				
		 		REV	ECO	DATE / SIGNATURE	REV	ECO	DATE / SIGNATURE	\neg	04	20-3	0		

PAGE 1 OF 1





P9 2 3 KEY 6 +24 RET -+247 8 207072-001

- STRIP WIRE ENDS BACK . 19 AND LABEL AS SHOWN.
- MARK CONNECTORS WITH APPROPRIATE REF DESIGNATION USING .12 HIGH WHITE CHARACTERS PER CDP SPEC 100013-001.
- MARK WITH PART NO., APPROPRIATE DASH NO. & LATEST REVISION LEVEL PER COP SPEC 100037-001.

NOTES: UNLESS OTHERWISE SPECIFIED

PART NUMBER SEE SEPARATE M/L

			•			P. Company
NOTES UNLESS SPECIFIED	DRAWN MATTHES 5-26		1		THIS DRAWING CONTAIN	NS PROPRIETARY
1. TOLERANCES	CHECK Hom Majorani 6/1/82	BILL	445		INFORMATION OF CIPHER WHOLE OR IN PART BE DISCLOSED OR USED FOR	Duplicated or
.XX± — ANGULAR	APPR. Yearle 4/14/82			and the same of th	ANY PARIT DISCLOSED HEI PRIOR WRITTEN PERMISSI	rein without the 🛭
.AAAI = = =	MATERIAL	Garden Grov	re Divisio	n	DATA PRODUCTS, INC.	
2. BREAK ALL SHARP EDGES APPROX010			_			<u>GO :</u>
		I ASSY	', CA	BLE -	MOTOR	915
3. MACH. SURFACES	FINISH		ð			Banana and a second
4. ALL DIMS IN INCHES.		DRIVE	EP.	PWB.	30 IPS	GIV REGID.
5. DIMENSIONS APPLY AFTER						1
SINISH AND HEAT TREAT	MODEL No.	SCALE	SIZE			RIV.
	QB	1.		2070	73-100	_ 8 9
		\/\	B	2010	12-106	DIAI
DSC:R	NEXT ASSY	<u> </u>				
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5 52 61 S 7 0 1 1 M P 207073 — 001 A

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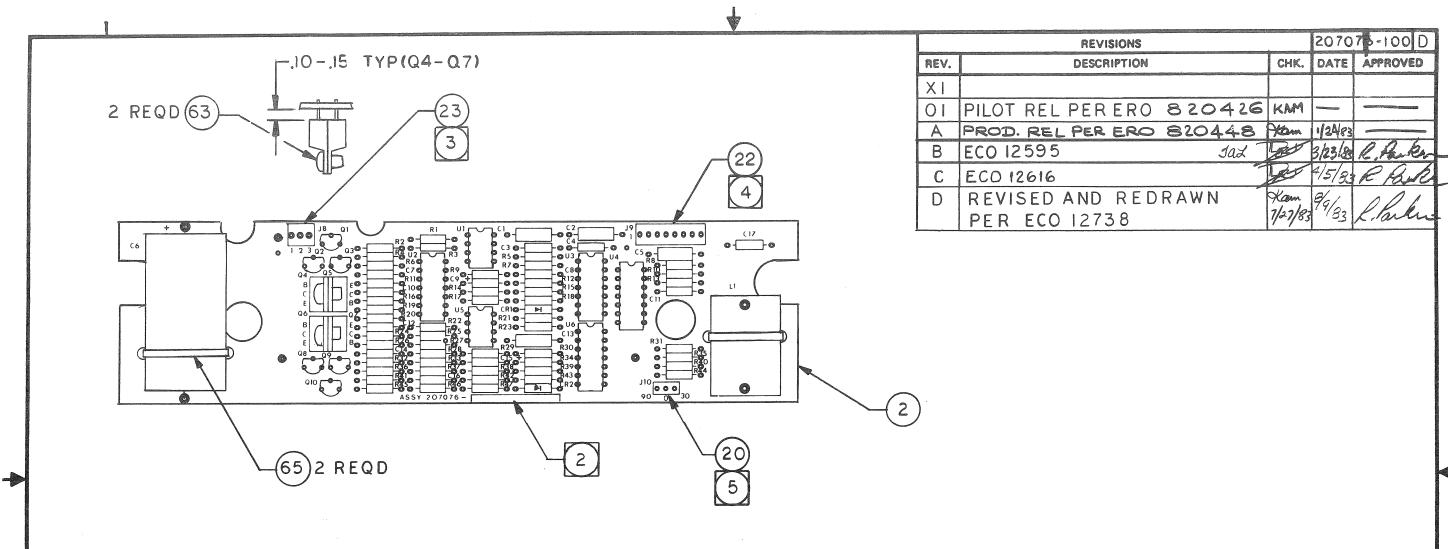
ASSY, CABLE - MOTOR DRIVER PWB, 30 IPS

DSC: R

Q115

19	PART NUMBER	NO.	DESCRIPTION	REMARKS	WHOLE DECIMAL	U.M. CODE
	105081 -607	- 1	CONNECTOR HSG - 7 POS.	P4	1	
	105081 -608	2	CONNECTOR HSG - 8 POS.	P9	1	
	130006 -001	3	KEY, CONNECTOR HSG		1	
	100053 -926	4	WIRE, HOOKUP	26 AWG WHITE	58	06
	133500001	5	CABLE MARKER		1	
	207073 -100	6	ASSY DWG		0	
	_					
	_					
	-					
	- .:					
PARED	T. Scote	5-24	4-82		DWG REL NO.	DATE
ECKED	Oten Makhawi	5/24			822368 0	
SIGN	9 Pirez	6/14/	(82 /REL PER - 1/2/82 /2/82		NEXT ASSEMBLY	
			OI PILOT A DATE/SIGNATURE REV	ECO DATE / SIGNATURE	MODEL NO. 0420-	-30

AGE 1 OF 1



6. SECURE C6 WITH RTV AFTER ASSEMBLY.

install jumper on jio from center pin to appropriate pin indicating desired speed

4 CUT OFF PIN 6 (KEY POSITION) WITHIN .030

3 CUT OFF PIN I (KEY POSITION) WITHIN .030

2 MARK PART NUMBER, APPROPRIATE DASH NUMBER AND LATEST REVISION LETTER PER CIPHER DATA PRODUCTS SPEC 100037-001

I. FOR SCHEMATIC SEE DRAWING NUMBER 207076-200
NOTES: UNLESS OTHERWISE SPECIFIED

PART NUMBER SEE SEPARATE M/L

1. TOLERANCES .XX ± ANGULAR .XXX ± ±	CHECK Plan Malagari 10/5/82 APPR. K. Parker 196/82 MATERIAL	(F///	nducts, inc.	THIS DRAWING CONTAINS PRO INFORMATION OF CIPHER AND MA WHOLE OR IN PART BE DUPLIC DISCLOSED OR USED FOR MANUFA ANY PART DISCLOSED HEREIN WIT PRIOR WRITTEN PERMISSION OF TI DATA PRODUCTS, INC.	AY NOT IN CATED OR ACTURE OF THOUT THE
2. BREAK ALL SHARP EDGES APPROX. 010 3. MACH. SURFACES ————————————————————————————————————	FINISH	ASSEM MOTO	R	COOL Q 120 atv mead.	
FINISH AND HEAT TREAT	MODEL No. QUARTERBACK NEXT ASSY	SCALE //	B 2070	76-100	D REV.
DSC:R		DO NOT SCALE THIS DRAWING	CODE	SHEET OF	1

etar <u>s</u>	nmdurie ke
00000000000	a lan consense e se vense.

S 7 0 1 1 M P 207076 — 001 REV D

eipher •

122522 - 001

107201- 001

104903 001

100360- 001

120917 - 003

123079_ 001

Q 120 DSC: R MOTOR DRIVER

19	PART NUMBER	ITEM NO.		DESCRIPTION			REMARKS	WHOLE 12	DECI	MAL 18	U.M. CODE				
P		1										i			
P	207075- 001	2	BOA	RD,	PROCE	SS					1				
•	_	3													
P	_	4									ļ				
P	102665— 104	5	CAP	AC I	TOR,50	V,.1UF	•		C3,C	4,C10,C11,e17	5				
P	102667- 103	6	6 CAPAG		TOR,10	%,100V	,.01UF		C7,0	C7,C12,C14,C16					
P	102667- 104	7	CAPA		CAPACITOR,10%,100V,.1UF			C13		1				_	
P	102667_ 183	8			CAPACITOR, 10%, 100V, .018UF			C8		1	1				
P	102668- 472	9	CAP	A C I	TOR,5%	, 50V,	.0047UF		C2,0	5	2				
y	102667- 473	10	CAP	A C I	TOR,10	0%,100V	,.047UF		C1		1				
7	102608_ 108	11	CAP	A C I	TOR,35	5V,1000	UF		C6		1				
•	102768_ 106	12	CAP	A C I	TOR,20)%,10V,	10UF		C9,0	15	2				
	_	13													
4	_	14					- / (
REPARED	T.A. Lindman	6-29-	82	cl	12616	R.R. H	1 4/5/9				DWG R	EL NO.		DATE	10-420
HECKED	Kom Makhani	7/9/8		В	12595	RVM	per=/:= ?				820	426			
DESIGN	R. Parker	10/6	,	Α	BROD-REI	1124183 ·					NEXT AS	SEMBLY		D D	Y
				01	PILREL	10/5/83	-								
				X1				D	12738	P. Parker 7/27/83	MODEL	10.			
				REV	ECO	DATE	/SIGNATURE	BEV	ECO	DATE / SIGNATURE	7				

123248 -- 001 74LS136 26 I.C. 125044 -- 001 LM358 27 I.C. 125043 -- 001 28 I.C. NE 556 29 I.C. 123029 - 001

24

25 1.C.

ITEM NO.

15

18 DIODE,1N4150

20 CLIP, JUMPER

21 PIN, WIRE WRAP,.025SQ

22 HEADER, . 100CTR, 8 POSITION

23 HEADER, .100CTR,3 POSITION

ASSEMBLY PARTS LIST

DESCRIPTION

16 INDUCTOR, HIGH CURRENT 100سh+10% L1

REMARKS

CR1,CR2

J10

J10

J9

U3

U1,U5

U 4

R44

R35

R15,R21,R30

2

3

31 RESISTOR, 1%, 1/4W, 634 100155- 270 100155__ 289 32 RESISTOR, 1%, 1/4W, 1K 100155_314 33 RESISTOR,1%,1/4W,1.82K S 7 0 1 1 M P 207076-001 D

ASSEMBLY PARTS LIST

1 5 52 61 S 7 0 1 1 M P 207076-001 D

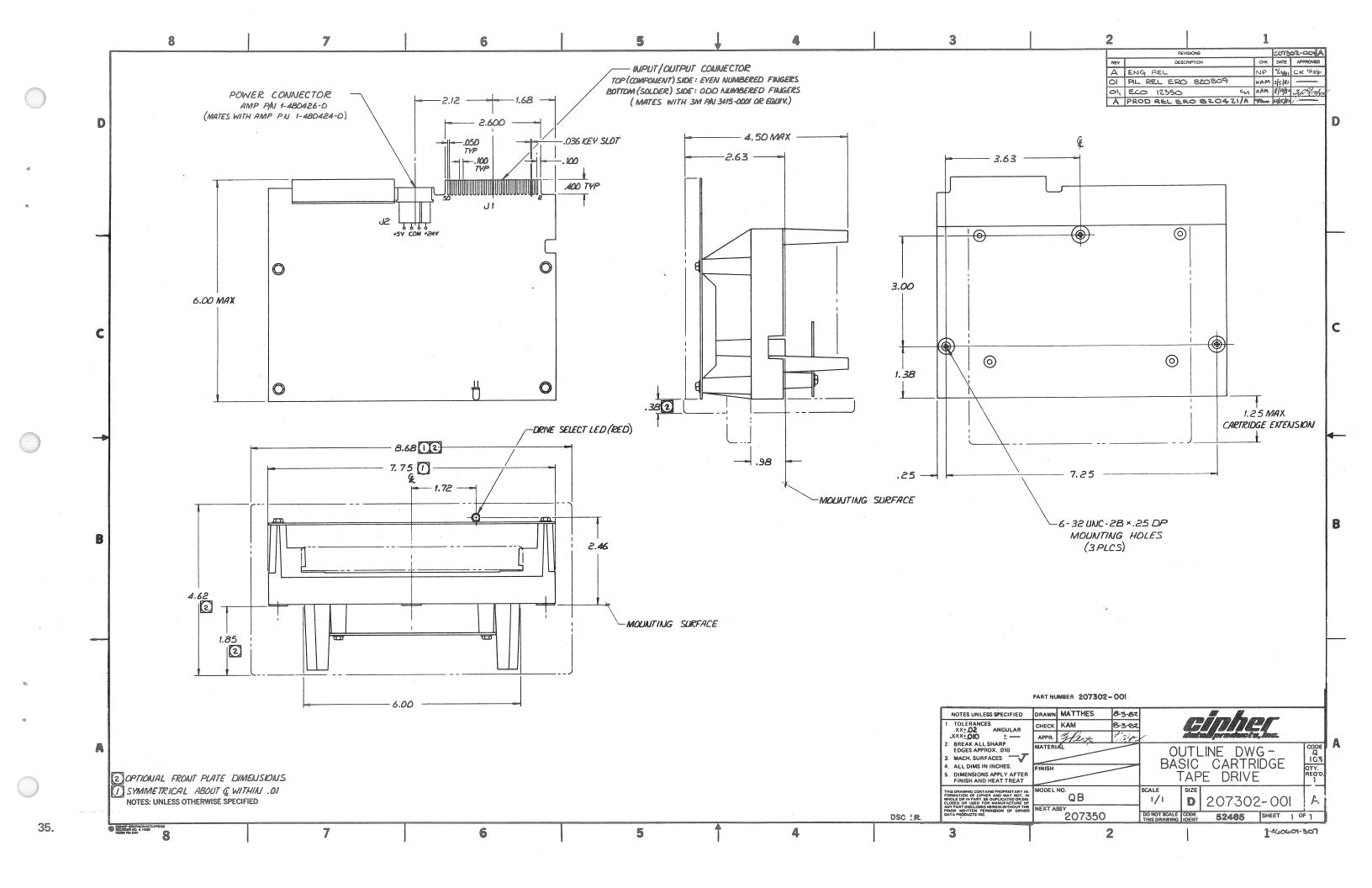
Gordon Grava	Dhriston		(CONTINUATION)						
19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS		ANTITY DECIMAL 18	U.M. CODE		
M P	100155- 318	34	RESISTOR,1%,1/4W,2K	R40	1				L
M P	100155 334	35	RESISTOR, 1%,1/4W,2.94K	R17	1				L
M.P.	100155_ 347	36	RESISTOR, 1%, 1/4W, 4.02K	R18,R23	2				L
M P	100155_ 385	37	RESISTOR, 1%, 1/4W, 10K	R29,R42	2				L
M P	100155_ 444	38	RESISTOR,1%,1/4W,41.2K	RIO	1	! !			L
M P	100155_ 452	39	RESISTOR,1%,1/4W,49.9K	R12,R34	2	 			
MP	100155_ 460	40	RESISTOR,1%,1/4W,60.4K	R31	1				
M P	100155_ 477	41	RESISTOR,1%,1/4W,90.9K	R7	1	! !			
M P	100155_ 481	42	RESISTOR,1%,1/4W,100K	R5,R9,R14,R38	4				
M P	100155_ 548	43	RESISTOR,1%,1/4W,499K	R8,R39	2				
M P	101156- 101	44	RESISTOR,5%,1/4W,100	R16,R25,R28,R37	4	i 1 1			
MP	101156 102	45	RESISTOR,5%,1/4W,1K	R47	1				L
M P	101156 103	46	RESISTOR,5%,1/4W,10K	R2,R36	2				L
MP	101156 122	47	RESISTOR,5%,1/4W,1.2K	R13	1		<u></u>		L
M P	101156_ 202	48	RESISTOR,5%,1/4W,2K	R1	1	<u> </u>	<u> </u>		L
M P	101156_ 203	49	RESISTOR,5%,1/4W,20K	R43,R46	2				
MP	101156_ 392	50	RESISTOR,5%,1/4W,3.9K	R4,R6,R20,R26,R27,R32	6				L
M P	101156_ 561	51	RESISTOR,5%,1/4W,560	R22,R33	2				L
M P	101156_682	52	RESISTOR,5%,1/4W,6.8K	R19,R24,R41,R45	4			<u></u>	l

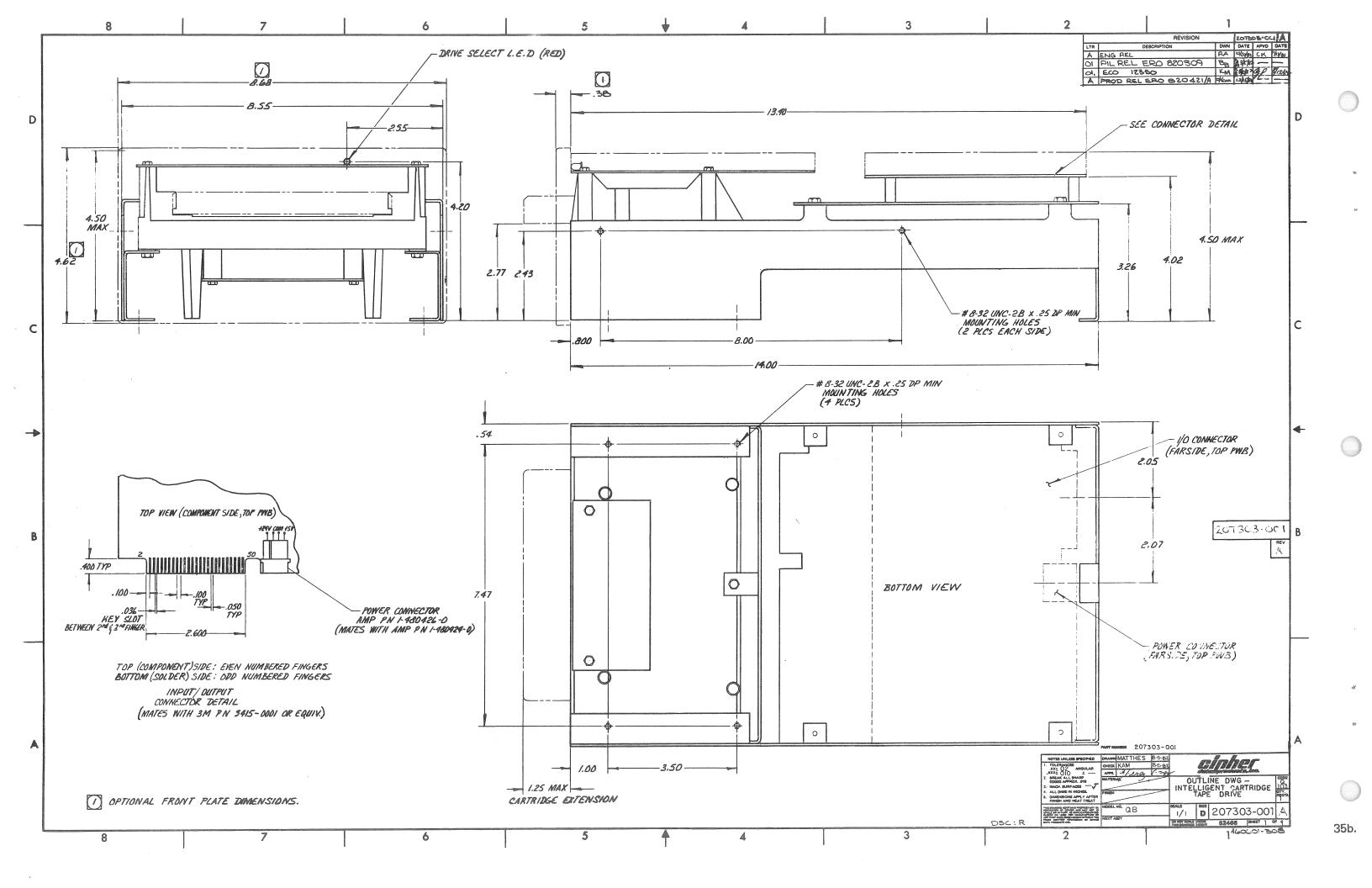
PAGE 1 OF 5

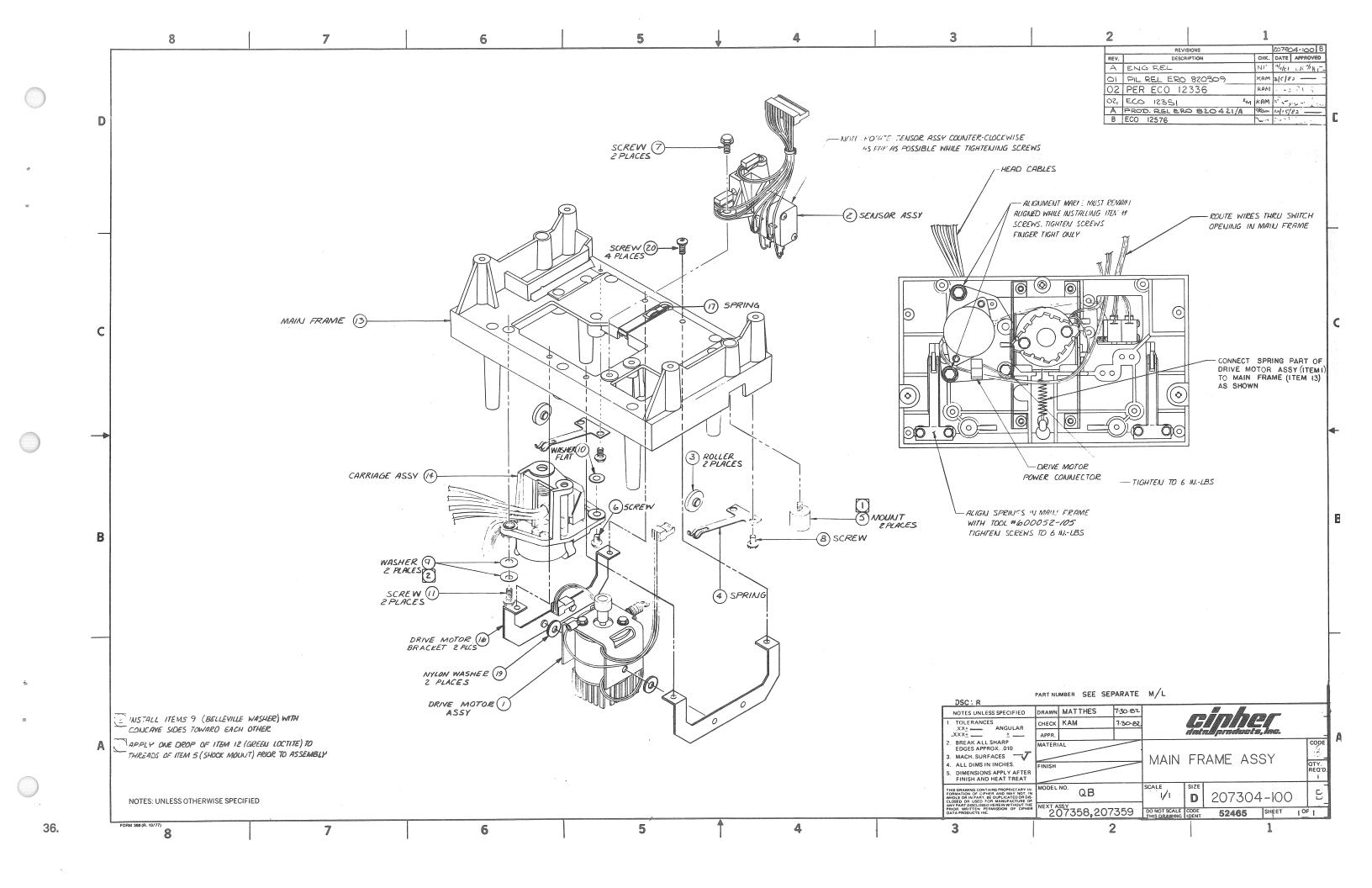
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S 7 0 1 1 M P 207076 — 001 D

dataEprad	uete, Inc.		ASSEMBLY PA	ARTS LIST	ASSEMBLY PART NUMBER							
landon Grovo	Division		(CONTINUAT	rion)	T	QUANT	ITY U.M.	-				
19	PART NUMBER	ITEM NO.	DESCRIPTION		REMARKS	WHOLE I D	ECIMAL CODE	-				
M P	101156- 752	53	RESISTOR,5%,1/4W,7.5	K	R3	11		_				
M P	142033 001	54	RESISTOR,1%,1W,0.1		R11	1						
M P		55										
M P		56										
M P	151027_ 002	57	TRANSISTOR	TIP120	Q5,Q7	2	_					
M P	151028 002	58	TRANSISTOR	TIP125	Q4,Q6	2		_				
M P	151030_ 001	59	TRANSISTOR	2N3904	Q2,Q3,Q8,Q9	4						
мР	151031001	60	TRANSISTOR	2N3906	Q1,Q10	2						
мР	-	61										
мР	_	62						_				
M P	210708 - 420	63	RIVET-POP		Q4,Q5,Q6,Q7	2						
M P	-	64				2						
M P	100171 - 002	65	TY-RAP 1/16-1 1/4		L1,C6	2						
мР	_	66										
мР	207076 100	67	ASSEMBLY DRAWING			0		_				
мР	207076- 200	68	SCHEMATIC			0						
MP	207074_ 001	69	PRINTED MASTER			0						
M P		70										
M P	-	71										







BIDIES

MEMBLYVIVLE ASSY, MAIN FRAME

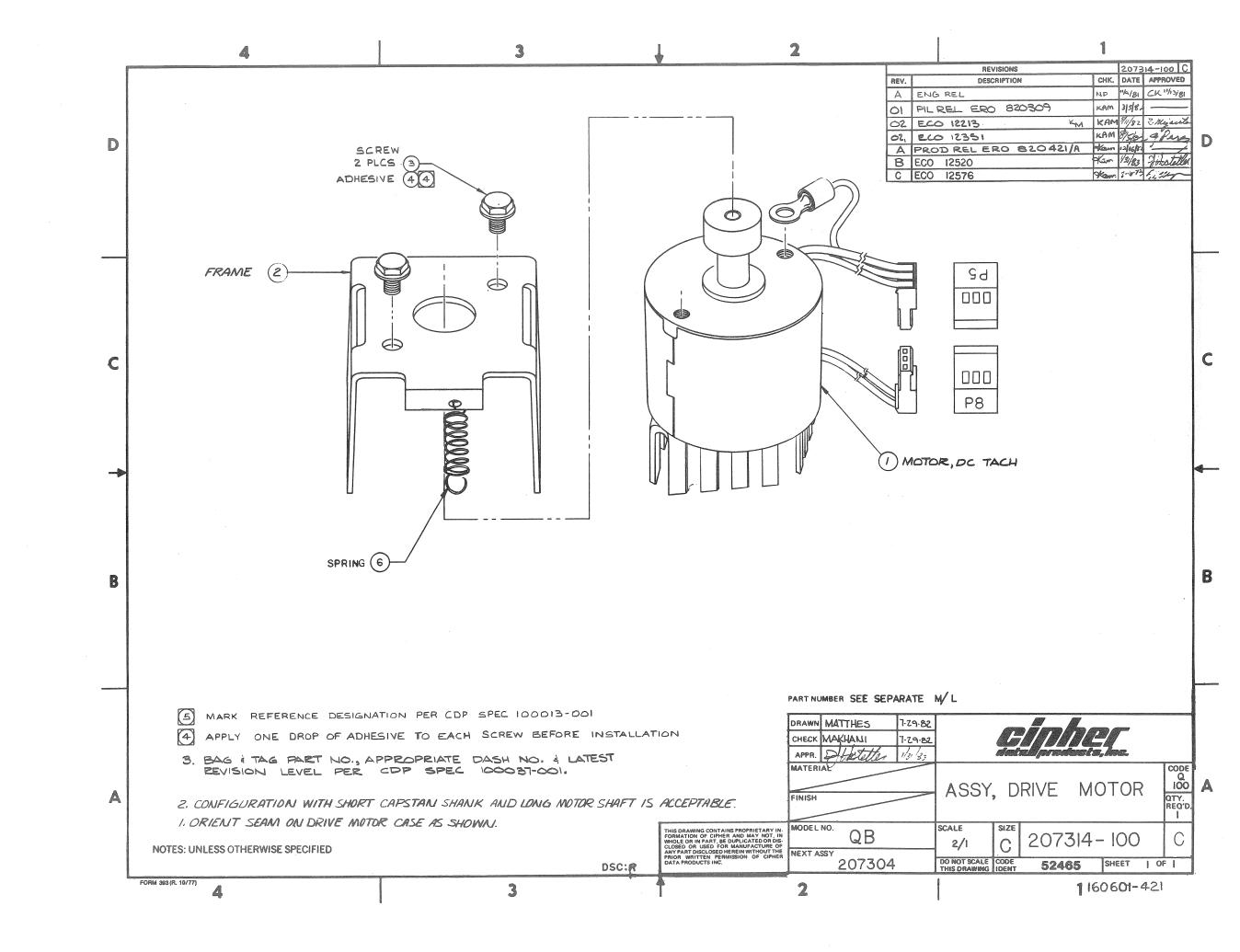
ASSEMBLY PARTS LIST

S 7 0 1 1 207304 -001 BEV ASSEMBLY PARTS NUMBER

DSC: R @100

10	PART NUMBER	NO.	DESCRIPTION	REMARKS	WHOLE DECIMAL CODE
	207314 - 001	1	ASSY, DRIVE MOTOR		
	207324 - 001	2	ASSY, SENSOR		1
	207309 - 001	3	ROLLER - DETENT (MOLDED)		2
	207308 - 001	4	SPRING - DETENT		2
	135001 - 001	5	MOUNT - SHOCK		2
	145026 - 306 6		SCREW - WASHER HD HEX 6-32X3/8		1
	145027 - 306	. 7	SCREW - THREAD CUTTING INDENTED HEX WASHER HEAD		2
	145027 — 304	8	SCREW - THREAD CUTTING INDENTED HEX WASHER HEAD		4
	143027 - 304		WASHER - BELLEVILLE		4
	163010 - 003	10	WASHER - FLAT		1
	145026 - 308	11	SCREW - WASHER HD HEX, INDENTED 6-32 X 1/2		2
	100465 - 003	12	ADHESIVE-ACCELERATOR		A/R
	207311 - 001	13	MAIN FRAME		1
	207329 — 001	14	ASSY, CARRIAGE		1
PARED	Sue Redmond	I-15	-82 B 12576 & GHUY-2-16-83		DWG REL NO. DATE
CKED BY SIGN	4 fees	1-26-	82 A 82042VA 12/14/22		820287 2 1182
INEER	2/10/5	1-29-8			M M D D Y
	0		02 12217 254/82 B Mariana		207358/207359
٠.			OI PIL RELA		MODEL NO.
			REV ECO DATE/SIGNATURE REV ECO	DATE / SIGNATURE	0420-30/90

-		-	(CONTINUATION)		7	7110101	приниминация	and a
19	PART NUMBER	NO.	DESCRIPTION	REMARKS	WHOLE	ANTITY DECIMAL	CODE	
1 P	207304 - 100	15	ASSEMBLY DRAWING			1		_
P	207377 — 001	16	BRACKET, DRIVE MOTOR		2	1	\Box	
L.	207376 — 001	17	SPRING, CARTRIDGE		1	-	\Box	
P	-207279	- 10	GIRLIA GERGENI			ļ	\vdash	
7	100050 _ 301	19	WASHER, FLAT NYLON	.192 ID X .50 OD X .010	2		11	
	100293 _ 104	20	SCREW, BUT. HD. BLK	4-40 X 1/4	4		\Box	
1.0	-				1			_
					1		\Box	_
	-				1			_
P	_				1		\Box	-
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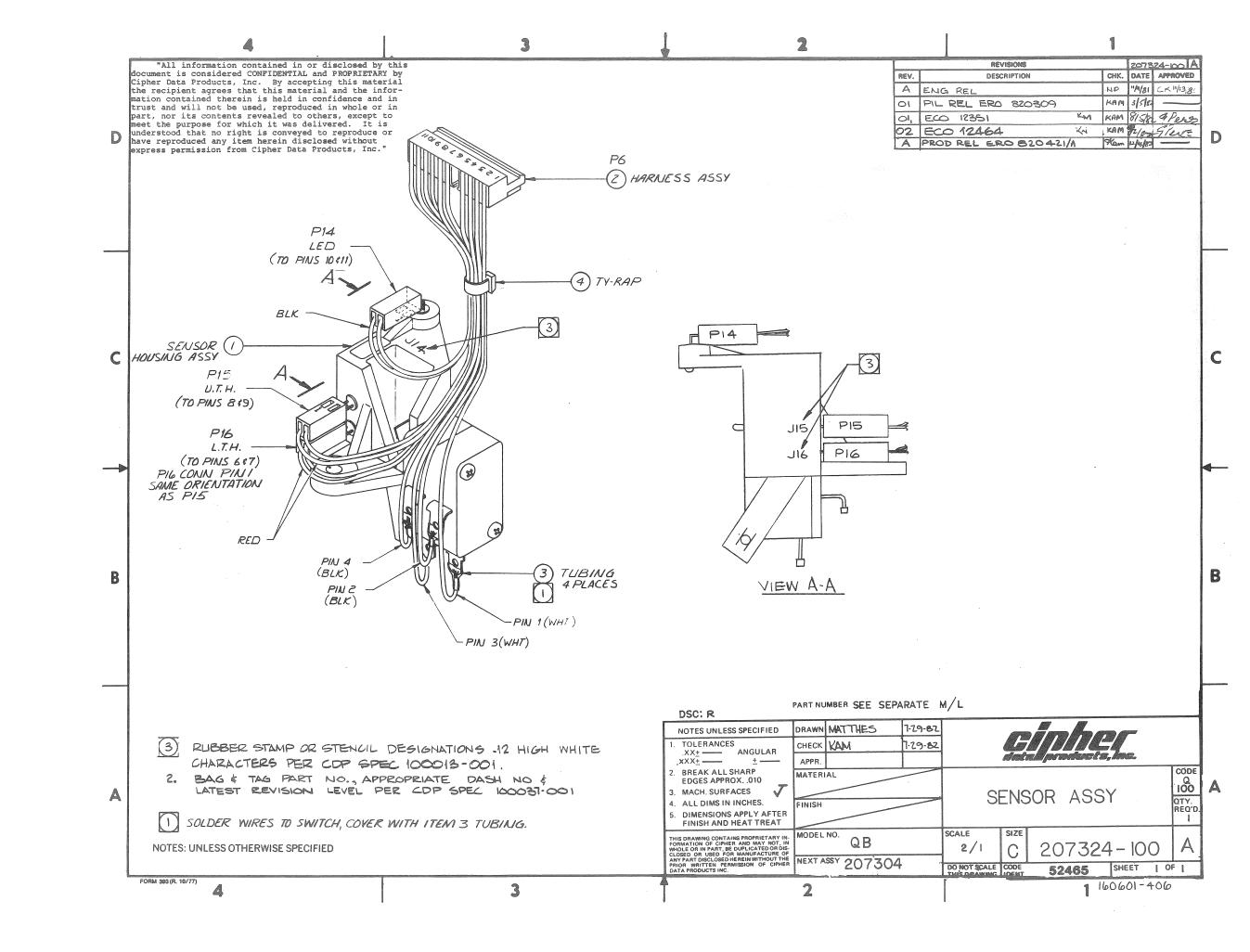


37.



DSC:R Q100 ASSY, DRIVE MOTOR

19	PART NUMBER	ITEM NO.	DESCRIPTION REMARKS	QUANTITY WHOLE DECIMAL 12 18	U.M. CODE			
	207362 — 001	1	MOTOR, DC TACH	1				
	207315 - 001	2	FRAME, MOTOR	1				
	145026 - 304	3	SCREW, WASHER HD HEX 6-32 X 1/4	2				
	100303 - 004	4	ADHESIVE / SEALANT (LOCTITE) BLUE	A/R				
	207314 - 100	5	ASSEMBLY DRAWING	0				
	207379 _ 001	6	SPRING, CAPSTAN	1				
	-							
	·							
-								
	· · · · · · · · · · · · · · · · · · ·							
EPARED	Sue Redmond	1-15-	12 B 12520 1/3/93 DI Litelles 1	DWG REL NO.	DATE			
ECKED	11.185	1-26-	FZ A BROWN Williams	820287 2				
ESIGN GINEER	21100	1-29		M M D D Y				
	7.		02 12213 #1/6, 2/14; and C 12576 Alley 24543	207304	1			
		OI PIL REL . C		0420-30/90				
4 798 (PI			REV ECO DATE/SIGNATURE REV ECO DATE/SIGNATURE		PAGE 1 OF			



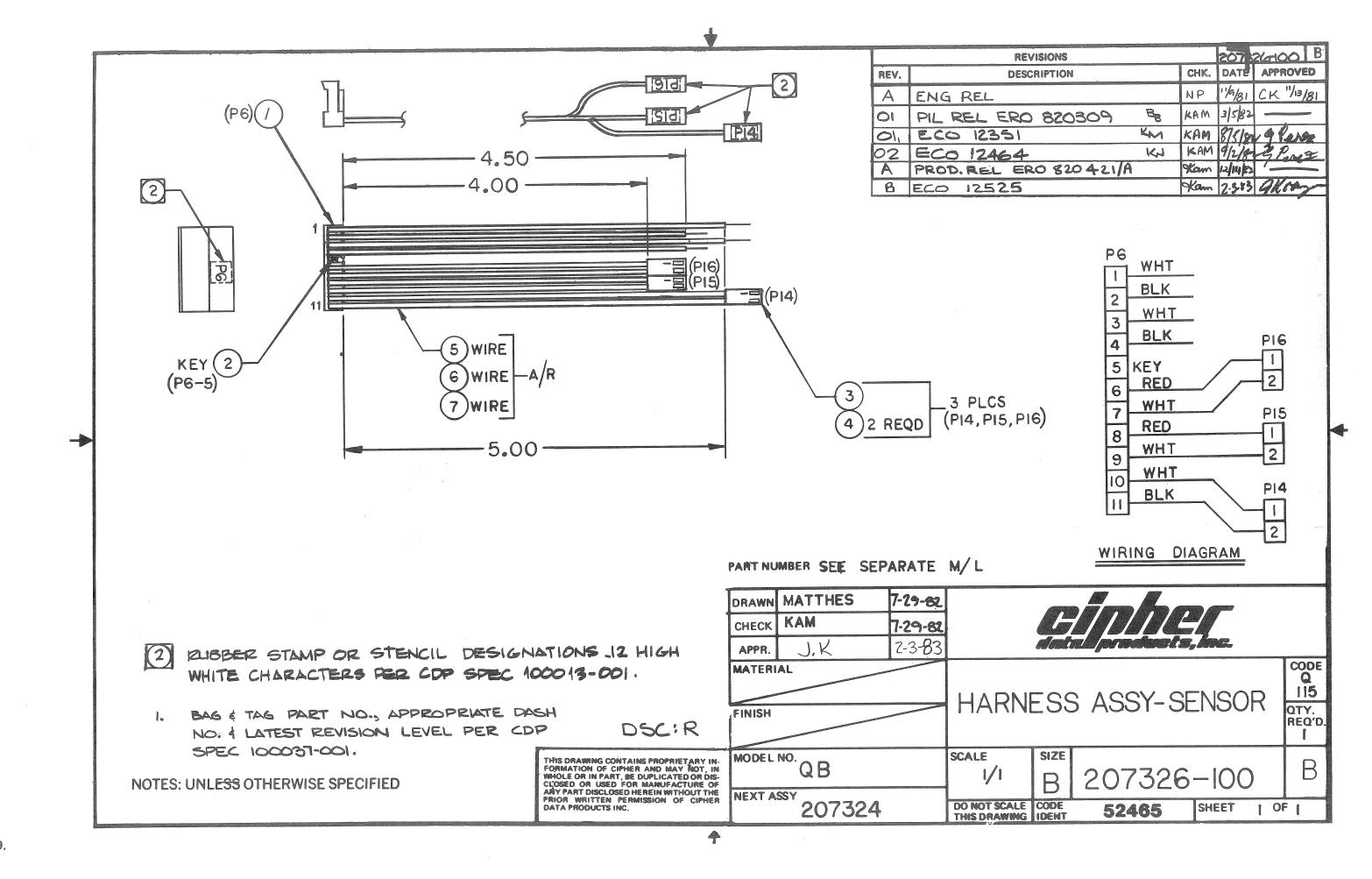


						5 52			
S	7	_	0	1	1	m	207324	-001	A
_			_	_		ASSEME	BLY PARTS NUM	BER	

ASSY, SENSOR DSC:R 0000 00100

10	PART NUMBER	ITEM NO.			C	DESCRIPTION			REMARKS	WHOLE 12	DECIMA	U.M.		
	207325 - 001	1	ASS?	ζ, :	SENSOR	R HOUSING	•			1			L	1
	207326 - 001	2	ASS	Z, 1	HARNES	S SENSOR				1			L	1
	100185 - 004	3	TUB:	ING	, HEAT	SHRINKABLE				4		06	L	1
	100171 - 001	4	TY-F	RAP	, 1/16	TO 5/8				1			L	
	207324 - 100	5	ASSI	EMB	LY DRA	WING		1		0			L	1
	_											Ш.	L	
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	—												L	
	-												L	
												Ш.	L	
	_												L	
												Ш.	L	
EPAREL	Sue Redmond	1-14-	-82	T			T			DWG RE		DAT		_
BY		1-26.		A	BZOYZY	la istige-	1			820	287	2 4 M D		3.3
EBION GINEEF	Prace	1-29	192	K	PROD.		1			NEXT AS	SEMBLY 207	_		-
		-		02	PIL REL	100 100 100	1			MODELN	ю.	0-30/9	 90	_
	1			REV	ECO	DATE / SIGNATURE	REV	ECO	DATE / SIGNATURE		3.0	/-	-	

PAGE 1 OF _______



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ASSEMBLY PARTS LIST

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DSC:R POC CODE Q115

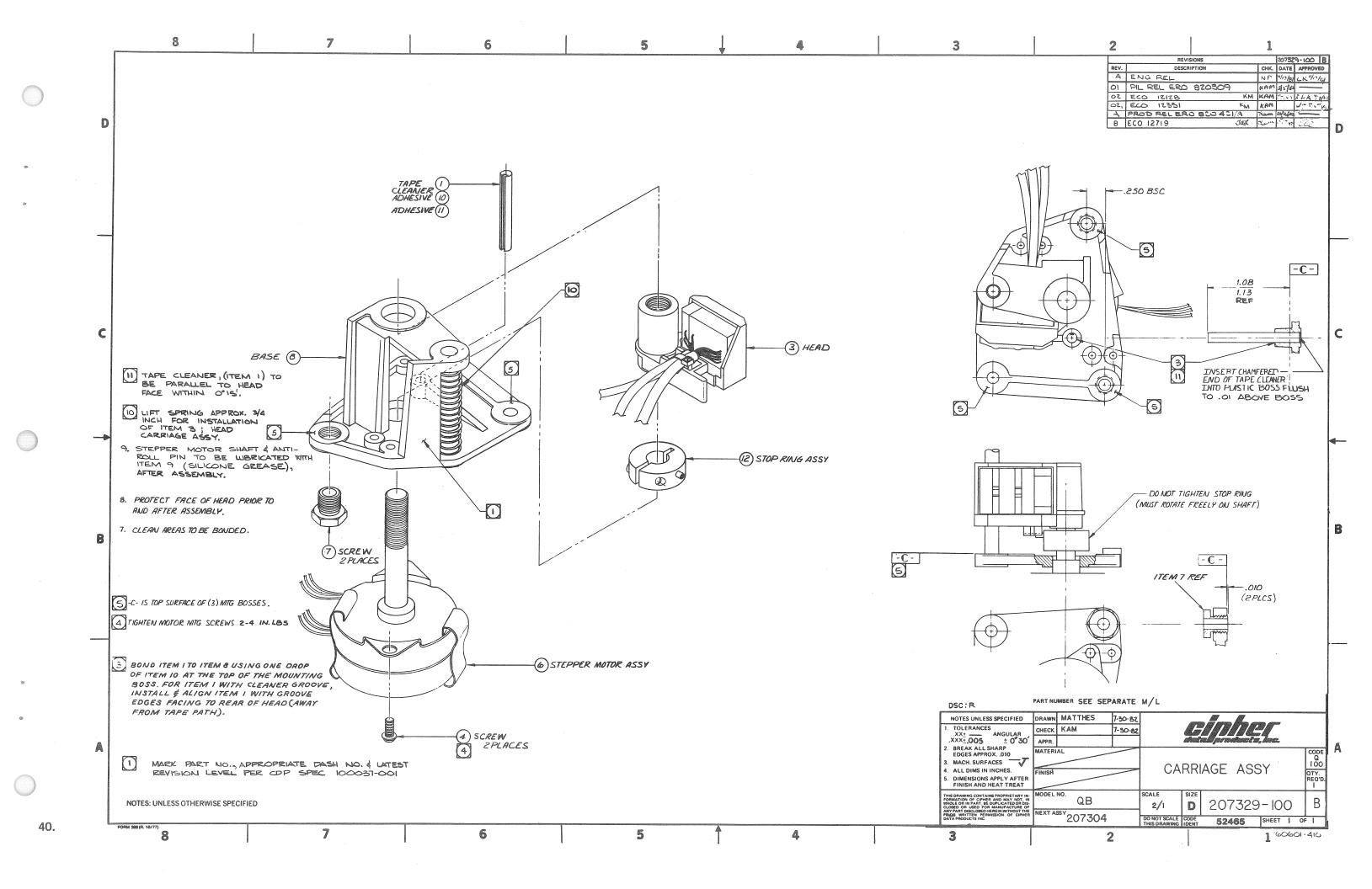
ASSY, HARNESS - SENSOR

PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	WHOLE	DECIMAL	U.M. CODE	_
105081 - 611	1	CONNECTOR, HOUSING	P6	1			_
130006 - 001	2	KEY, CONNECTOR HOUSING	·	1			_
105082 - 001	3	CONNECTOR, HOUSING	P14,P15,P16	3			
106017 - 101	4	CONTACT, CRIMP 22-30GA		6			_
100053 _ 026	5	WIRE, HOOKUP 26 AWG, BLACK		18		06	
100053 - 226	6	WIRE, HOOKUP 26 AWG, RED		11		06	
100053 _ 926	7	WIRE, HOOKUP 26 AWG, WHITE		28		06	
207326 — 100	8	ASSEMBLY DRAWING		0			
			51	1			
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<u>-</u>				<u> </u>	<u> </u>		

FORM 798 (R 99/99)

AGE 1 OF 1

0420-30/90



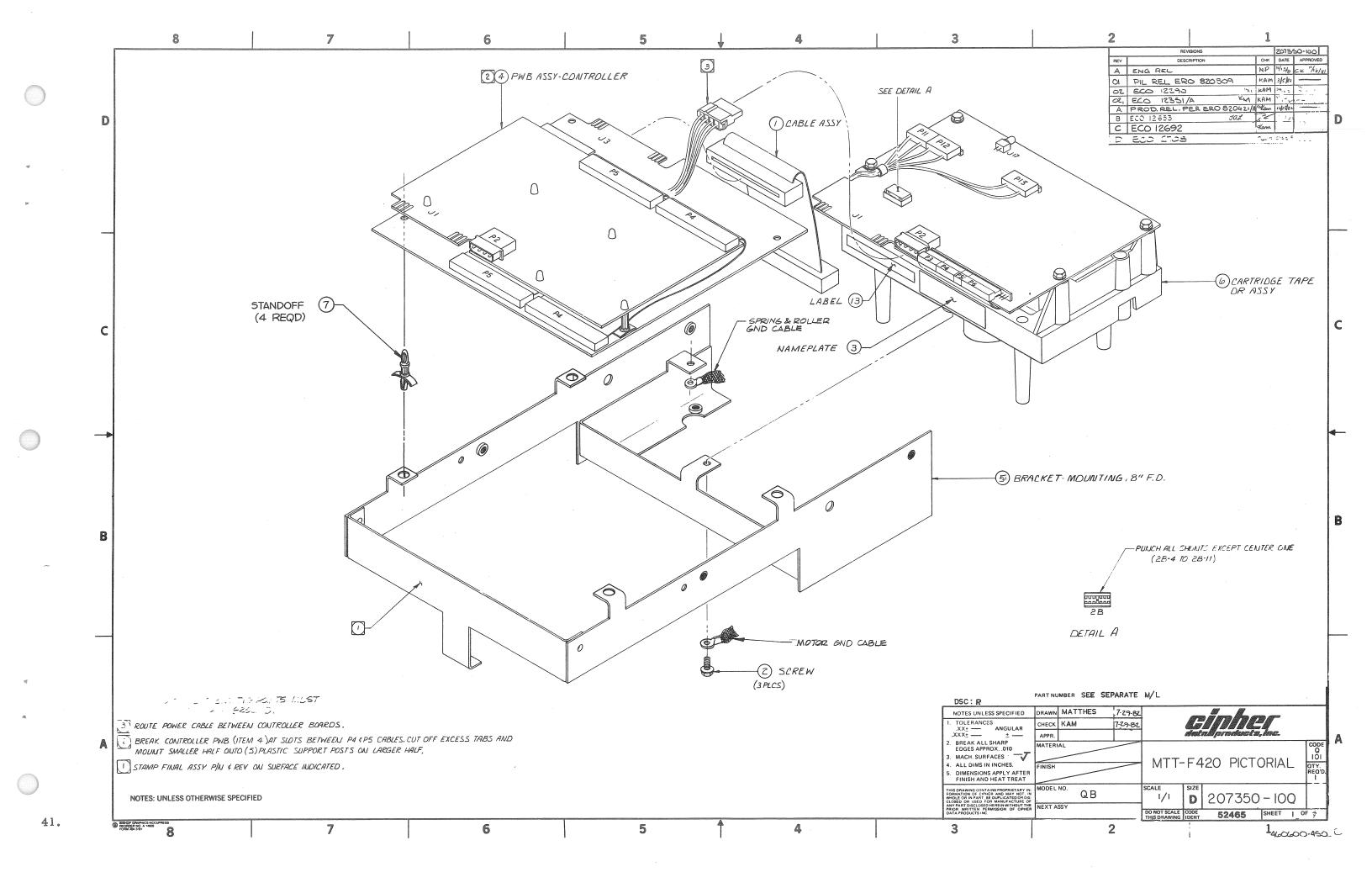


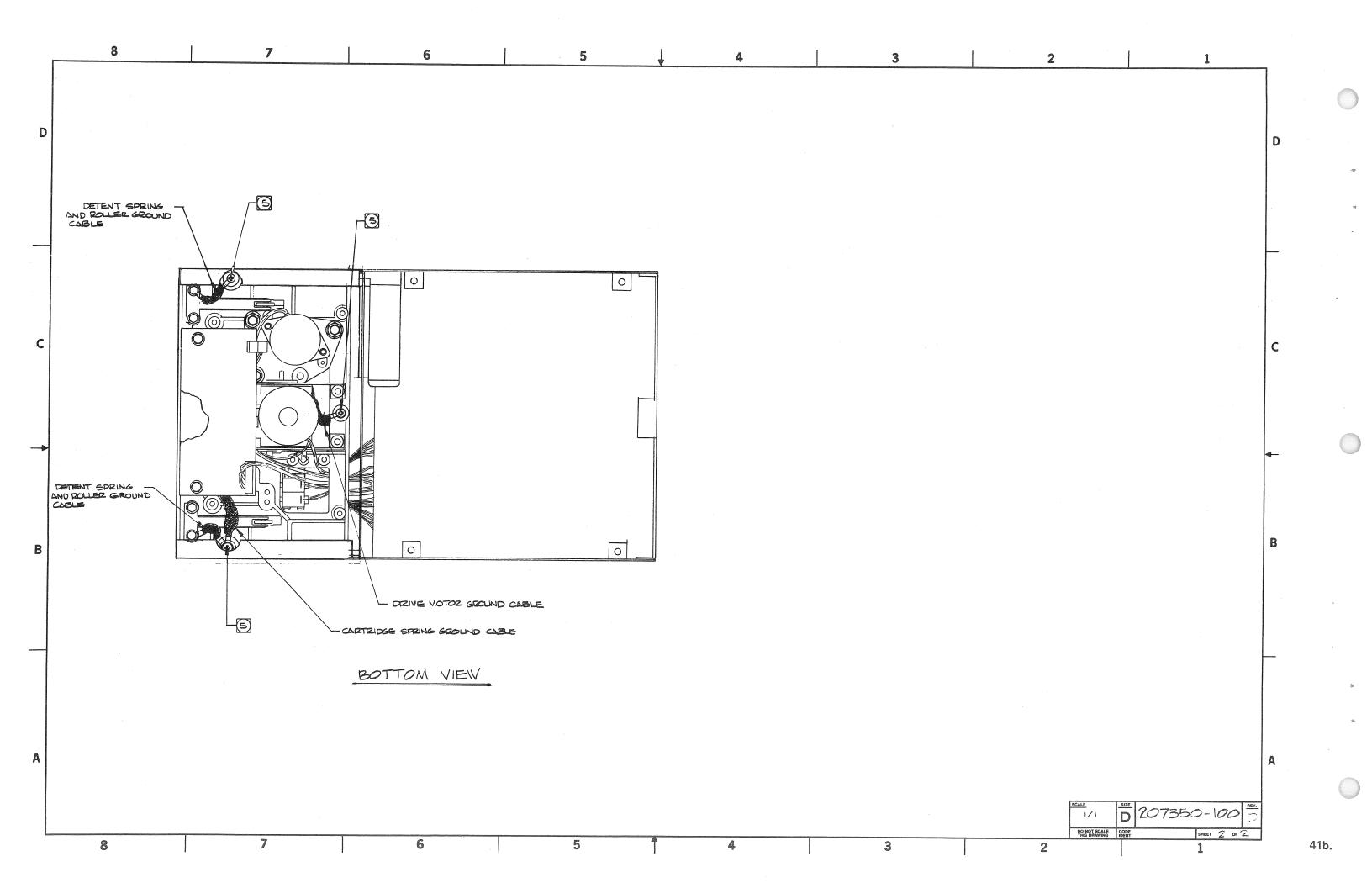
ASSEMBLY PARTS LIST

S 7 0 1 1 207329 -001 BEV ASSEMBLY PARTS NUMBER

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	ITEM	D CAR DE LA LA	 QUANTI	TYU.M.

19	PART NUMBER 28	ITEM NO.		(DESCRIPTION			REMARKS	WHOLE 12	ANTITY DECIMAL	U.M. CODE	
	207331 - 001	1	TAPE	CLEANE	R				1			
		2										
	207322 - 001	3	ASSY,	HEAD/	CARRIAGE				1			
	145027 - 304	4			EAD CUTTING X WASHER HEAD		NO. 6	-19×1/4	2			
		5							<u> </u>	i		
	207327 - 001	6	ASSY,	STEPP	ER MOTOR				1			
	207339 - 001	7	SCREW	- ADJ	USTMENT				2			
	207334 - 001	8	ASSY	CARE	IAGE BASE				1			
	100409 - 001	9	GREA	SE, SIL	ICONE		DOW	111	A/R			
	100465 - 002	10	ADHES	IVE					A/R			
	100465 - 003	11	ADHES	IVE					A/R			
£	207332 - 001	12	ASSY,	STOP	RING				1			
	207329 — 100	13	ASSEM	BLY DE	AWING				0			
REPARED	Sue Redmond	1-15		12719	PR 5.1753	SOURCE			DWG RE	L NO.	DATE	
BY	11.19:03	1-26.		BZOUZI/	Ham 13/14/82				8202			8.2
DESIGN NGINEER	1/11	1.29	52/	PROD.					NEXT AS	EMBLY	M D D	1 4
	1		02	12128	46/82 R. Majasala				1	207304	1	
				PILREL					MODELN	o. 0420-3	30/90	
			REV	ECO	DATE / SIGNATURE	REV	ECO	DATE / SIGNATURE				





MTT-F420, 30 IPS, 4 TK

1-79-82

ASSEMBLY PARTS LIST

S 7 0 1 1 207350 -001 BEV ASSEMBLY PARTS NUMBER

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PAGE 1 OF 2____

820287

F420-30

DSC: R

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BORM 795 (B 03/82) (Continuation

PART NUMBER

20 7 30 5 - 100

ITEM NO.

15 LABEL INSTRUCTIONS

Q-101 207020 - 001 ASSY, CABLE SCREW, WASHER HD HEX, INDENTED 6-32 x 3/16 NAMEPLATE, QUARTERBACK 145026 - 303 207341 - 002

207005 - 001 ASSY, PWB - CONTROLLER 940075 - 001 BRACKET, MOUNTING 8" F.D. ASSY, CARTRIDGE TAPE DRIVE 207359 - 003 0420. 30 IPS 147805 - 002 STANDOFF-LK, CKT, BD, SUP 3/8" Long 100472 - 001 SHIPPING BAG, PLASTIC - 16 X 14 950035 - 001 SHIPPING CARTON, OUTER BOX 950036 - 001 10 SHIPPING CARTON, INNER FOLD 207366 - 001 207350 - 100 12 MTT-F420, PICTORIAL 940012 - 101 13 LABEL, QUARTERBACK | PREPARED | Sue Redmond | 1-20-82 | CHECKED | 1/1/2 | 1-20-82 | DESIGN | 1/1/2 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/3 | 1/1/

D 12712 ALE 1279
C 12692 Who With the Per BCO DATE/SIGNATURE

MP

ASSEMBLY PARTS LIST

DESCRIPTION

207350 _ 001 | REV D

PAGE _2__ OF _2___

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SSEMBL V PART NUMBER

S 7 0 1 1 M P

REMARKS

ASSEMBLY PARTS LIST

S 7 0 1 1 8 2 207350 - 002 D

MTT-F420, 90 IPS, 4 TK Q101 DSC:R WHOLE DECIMAL CODE PART NUMBER DESCRIPTION 207020 145026 - 303 NAMEPLATE, QUARTERBACK TAPE DRIVE 207341 - 002 207005 - 002 4 ASSY, PWB - CONTROLLER 940075 - 001 5 BRACKET, MOUNTING 8" F.D. ASSY, CARTRIDGE TAPE DRIVE 6 0420, 90 IPS 207358 - 003 147805 - 002 7 STANDOFF-LK. CKT. BD. SUP 3/8" LONG 8 SHIPPING BAG, PLASTIC - 16 X 14 100472 - 001 9 SHIPPING CARTON, OUTER BOX 10 SHIPPING CARTON, INNER FOLD 950036 - 001 PRODUCT SPEC, QUARTERBACK STREAMING CARTRIDGE TP DR 207366 - 001 20 7 3 50 - 100 12 MTT-F420, PICTORIAL 940012 - 101 13 LABEL, QUARTERBACK PREFAREO Sue Redmond DAYE 1-20-82 CHECKED FIRE 1-20-82 CHECKED FIRE 1-20-82 CHECKED FROM CHECKED FOR THE CONTROL OF THE CHECKED FOR THE CHECKE D 12712 1 18 7:27/23 C 12692 2 7/25 3 1-15th. F420-90 REV ECO DATE / SIGNATURE REV ECO DATE / SIGNATURE

PAGE 1 OF 2:

F420-90

Garden Groot	MELL deseta fina.		ASSEMBLY PARTS LIST	S 7 0 1 1 M P	207350 ASSEMBLY PAR		BEV D
19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	QUANTITY WHOLE DECIM	U.M. AL CODE	
M P	20 7 30 5 100	15	LABEL INSTRUCTIONS		0		
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SEMBLY	MTT-F420, 30	IPS, 4	TK		DSC:R	0101		S 7 0 1	AS	207350 SEMBLY P	ART NUM	005 MBER	
19	PART NUMBER	ITEM NO.		C	DESCRIPTION			REMARKS	WHO!	DUANTIT LE DEC	IMAL 18	U.M.	
	207020 - 001	1	ASSY,							1			
¥	145026 - 303	2	SCREW, 6-32 x	WASHER 3/16	HD HEX, INDENTED					3			
P	207341 - 005	3	NAMEPL. TAPE D	ATE, QUA	RTERBACK					ـــٰــــــــٰـــــــــــــــــــــــــ			
P	207005 - 001	4	ASSY,	PWB - CO	NTROLLER					<u>. 1</u>			
, i	940075 — 001	5	BRACKE	T, MOUNT	ING 8" F.D.					1			
	207359 — 004	6	ASSY, 0420,		E TAPE DRIVE					. 1			
P	147805 — 002	7	STANDO	FF-LK. C	KT. BD. SUP		3/8"	LONG		4			
I.	100472 — 001	8	SHIPPI	NG BAG, I	PLASTIC - 16 x 1	4				1			
	950035 — 001	9	SHIPPI	NG CARTO	N, OUTER BOX					1			
) P	950036 — 001	10	SHIPPI	G CARTO	N, INNER FOLD					.1			
	207366 — 001	11		SPEC.,	BASIC QUARTERBA	CK				. 0			
TI.	207350 100 .	1,2	MTT-F42	20, PICTO	ORIAL					٥ .			
F	940012 — 101	13	LABEL,	QUARTER	RBACK					1			
P	207305 - 100	15	LABEL	INSTRUCT	IONS					0			
REPARE	Sue' Redmond	7-9-8			m/CE 3-8-8					REL NO.	†	DATE	
	Ham Makhawi	7/151	0 -	12712	2 POE 1230				8204	∤20	9 м м	1 5	
DESIGN	RK. Kankri	11/11/		12692	The state of the s	吹			NEXT	ASSEMBL			
			18	12686 PROD	E 5.17.	3			MODE	L NO.			
			1	REL	11/4/82					F420-3			

S 7 0 1 1 M P 207350 — 006 H MTT-F420, 90 IPS, 4 TK DSC: R OUANTITY U.M.
WHOLE DECIMAL CODE PART NUMBER DESCRIPTION 207020 - 001 1 ASSY, CABLE 2 SCREW, WASHER HD HEX INDENTED 6-32 x 3/16 3 NAMEPLATE, QUARTERBACK TAPE DRIVE 145026 _ 303 3 207341 - 003 207005 - 002 4 ASSY, PWB - CONTROLLER 940075 _ 001 5 BRACKET, MOUNTING 8" F.D. 1 6 ASSY, CARTRIDGE TAPE DRIVE 0420, 90 IPS 207358 - 004 147805 - 002 7 STANDOFF-LK. CKT. BD. SUP 3/8" LONG 4 100472 _ 001 8 SHIPPING BAG, PLASTIC - 16 X 14 1 950035 - 001 9 SHIPPING CARTON, OUTER BOX 950036 - 001 10 SHIPPING CARTON, INNER FOLD 1 PRODUCT SPEC., BASIC QUARTERBACK 207366 _ 001 0 12 MTT-F420, PICTORIAL 207350 - 100 940012 - 101 13 LABEL, QUARTERBACK 15 MTT-F420 LABEL INSTRUCTIONS 207305 - 100 0 M M D D Y C 17624 7 , H 10730 7 , B 12577 7 , G 12712 7 , G 1271

ASSEMBLY PARTS LIST

42.

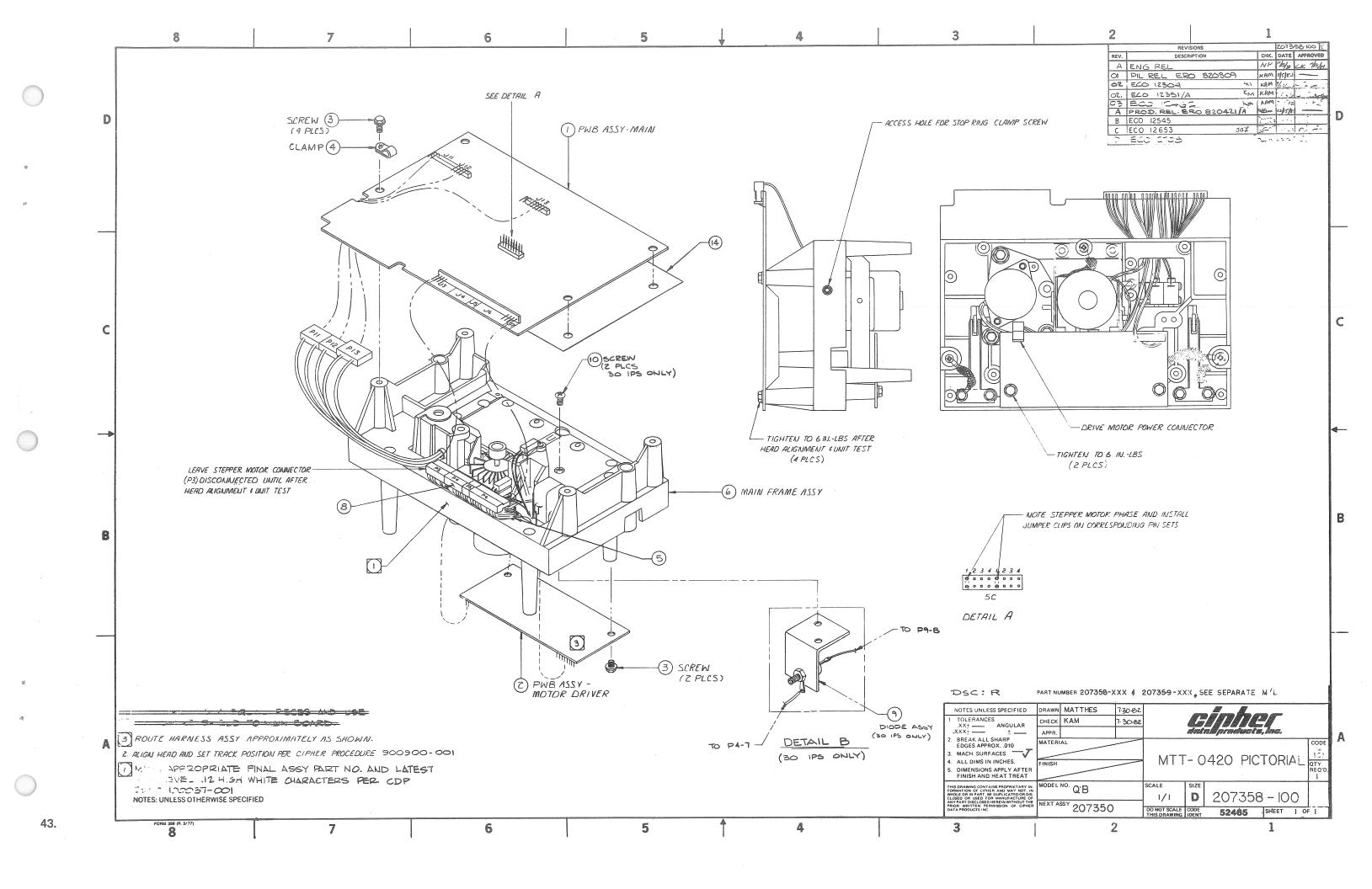
den Grove E					_					_	1		5	52				61 I BEV
EMBLY T	MTT-F420,	30 IPS	, 4	TK		DS	C: R	Q101			S 7	0 1	1 M	7.5%	07350			A
19	PART NUMBER	ITEM NO.				DESCRIPTION	ON				REMAR	RKS			DECI	Y . 1	U.M. CODE	
	207020 - 001	1	ASS	۲, ۱	CABLE									1				
į.	145026 - 304	2	6-3	2 X	1/4		X, INDE	NTED						3				
Ė	207341 - 008	3	NAM! TAP!	PL.	ATE, Q RIVÉ	UARTERB	ACK							1	1			
9	207005 - 003	4	ASS	<i>(</i> ,	PWB -	CONTROL	LER							1				
	940075 - 001	5				NTING 8		•						1	1			
B	207359 _ 005	6			CARTRI 30 IPS		E DRIVE							1				
	147805 _ 002	7	STA	(DO	FF-LK.	CKT. B	D. SUP.		3/8	_G				4	1			
	100472 _ 001	8	SHIF	PII	NG BAG	, PLAST	IC-16 X	14						. 1				
P	950035 _ 001	9	SHIF	PII	NG CAR	TON, OU	TER BOX							1				
7	950036 _ 001	10	SHIF	PII	NG CAR	TON, IN	NER FOL	D						1	-			
	207366 _ 001	11				., BASI PE DRIV	C QUART E	ERBACK						0				
Ī	207350 - 100	12	MTT-	-F4	20, PI	CTORIAL								0				
1														1				
	207305 - 100	:	LABE	L	INSTRU	CTIONS								0				
REPARED BY	S. HENCKE	04-18	-83											DWG R			DATE	
HECKED BY DESIGN 4GINEER	Kan Makliam	6/18/						-						820		мм	18	83
-GIVEEN	7	,,,,,,		\vdash		 		-										
				А	PROD.	6/23/83								MODEL		F420	-30	
	ĺ			REV	ECO	DATE.	/SIGNATURE	REV	ECO	1	DATE /	SIGNAT	URE	1				

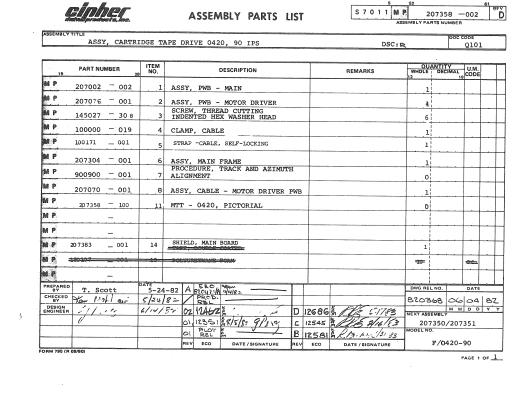
SSEMBLY T	MTT-F420,	on the	'A T	,			DSC: R	DOC C	PR	Ę:	ιċ	<u> </u>	, 0	1	1 M	٦	. ,	0735	n	010	1
	MII-F42U,	50 IF3,	, 4 11				DSC. K	۷.		1	JL	٥,			101	_1		MBLYP			
19	PART NUMBER	ITEM NO.			E	DESC	RIPTION				RE	MAI	RKS			-	01	ANTIT	V 1	U.M. CODE	
	207020 - 001	1	ASSY	, CA	BLE												1				
i e	145026 - 304	2	SCREV 6-32	v, W	ASHE!	R H	D HEX, IND	ENTED									3				
F	207341 - 010			LAT	E, QI		TERBACK										1				
10	207005 - 001	4	ASSY	, PW	В -	CON	TROLLER										1	<u> </u>			
TP	940075 001	1 1					NG 8" F.D.										1				
	207359 _ 005		ASSY 0420			DGE	TAPE DRIV	E									1				
T.	147805 _ 002	7	STAN	00 F F	-LK.	СК	T. BD. SUP			3/8 1	_G					T	4				
P	100472 _ 001	8	SHIP	ING	BAG	, P	LASTIC - 1	6 X 14	1								1	-			
P	950035 _ 001	9	SHIP	ING	CAR	TON	, OUTER BO	Х									1				
P.	950036 _ 001	10	SHIP	ING	CAR	TON	, INNER FO	LD									1				
P	207366 - 001	11	PRODU	JCT RIDG	SPEC E TAI	ĖĚ	BASIC QUAR DRIVE	TERBAC	K								0				
P	207350 - 100	12	MTT-	420	, PI	сто	RIAL										0	<u> </u>			
Î R	_																	<u> </u>			
	207305 - 100	1: 1	LABEI	. IN	STRU	CTI	ONS										0	<u> </u>			
REPARED	S. HENCKE	03-25	5-83	T		Π			1							F	DWG R	EL NO.	-	DATE	
BY	IL RETUNSON	3-25	-83						I							1	320	477	l	3 C	
DESIGN NGINEER	2) Yestelly	3-30-		_		4.4	Klb 8.13		1							_	EXT A	SEMBL	M M	DC	Y
	U			B 17	2760	A	1/1,8.8.	83	4							-1.	ODEL	NO.			
				A R	ROD. EL.	3			1							_ "			0-30		

19 2 M P 2 M P 2 M P 2 M P 1 M P 1 M P 1	MTT-F420, PART NUMBER 207020 — 001 145026 — 304 207341 — 011 207005 — 002 940075 — 001 207358 — 005 147805 — 002 100472 — 001 950035 — 001	ITEM NO.	ASSY SCRE INDE NAME TAPE ASSY BRAC ASSY 0420 STAN	, CA	ABLE WASHEF D 6-32 TE, QU IVE WB - (, MOUNTIFE ARTRIE O IPS F-LK.	DSC: DESCRIPTION R HD HEX 2 X 1/4 UARTERBACK CONTROLLER NTING 8" F DGE TAPE D CKT. BD.	.D.	(101	3/8 L		EMARK	S 1 1		ASSEM	07350 MBLY PA ANTITY DECIN	RT NU	
19 2 M P 2 M P 2 M P 2 M P 1 M P 1 M P 1	2807020 — 001 145026 — 304 207341 — 011 207005 — 002 940075 — 001 207358 — 005 147805 — 002 100472 — 001	NO. 1 2 3 4 5 6 7	SCRE INDE NAME TAPE ASSY BRAC ASSY 0420 STAN	W, NTE	ABLE WASHEF D 6-32 TE, QU IVE WB - (, MOUNTIFE ARTRIE O IPS F-LK.	R HD HEX 2 X 1/4 UARTERBACK CONTROLLER NTING 8" F DGE TAPE D	.D. RIVE		3/8 L		EMARK	s	- Washington	3 1 1	ANTITY	MAL 18	U.M.
M P 1 M P 1 M P 1	145026 — 304 207341 — 011 207005 — 002 940075 — 001 207358 — 005 147805 — 002 100472 — 001	2 3 4 5 6	SCRE INDE NAME TAPE ASSY BRAC ASSY 0420 STAN	W, NTE	WASHER D 6-32 TE, QU IVE WB - (, MOUR ARTRIE O IPS F-LK.	2 X 1/4 UARTERBACK CONTROLLER NTING 8" F DGE TAPE D CKT. BD.	.D. RIVE		3/8 L	_ G				3 1 1 1 1			
M P 2 M P 1 M P 1	207341 - 011 207005 - 002 940075 - 001 207358 - 005 147805 - 002 100472 - 001	3 4 5 6	INDE NAME TAPE ASSY BRAC ASSY 0420 STAN	PLA PLA DR PI KET	D 6-32 TE, QUIVE WB - QUIVE , MOUNTARTING O IPS F-LK.	2 X 1/4 UARTERBACK CONTROLLER NTING 8" F DGE TAPE D CKT. BD.	.D. RIVE		3/8 L	_ G				1 1 1			
M P 2 M P 1	207005 — 002 940075 — 001 207358 — 005 147805 — 002 100472 — 001	4 5 6	ASSY BRAC ASSY 0420 STAN	DR , PI KET , C/ , 9I	IVE WB - (, MOUR ARTRIE O IPS F-LK.	CONTROLLER NTING 8" F DGE TAPE D CKT. BD.	.D. RIVE		3/8 L	_ G				1			
M P 2 1 M P 1	940075 — 001 207358 — 005 147805 — 002 100472 — 001	5 6 7	BRAC ASSY 0420 STAN	KET , C/ , 9	, MOU! ARTRII O IPS F-LK.	NTING 8" F DGE TAPE D CKT. BD.	.D. RIVE		3/8 [. G				1			
M P 2 1 M P 1	207358 _ 005 147805 _ 002 100472 _ 001	6	ASSY 0420 STAN	, C/ , 9	ARTRII O IPS F-LK.	DGE TAPE D	RIVE		3/8 L	_ G				+			
M P 1	147805 — 002 100472 <u>001</u>	7	STAN	, 9	O IPS F-LK.	CKT. BD.			3/8 L	_ G				1			
M P 1	100472 _ 001		-				SUP.		3/8 L	. G					i		
00 00 00 00 00 00 00 00 00 00 00 00 00		8	SHIP	PIN					-					4	1		
M P 9	DE003E 001				G BAG	, PLASTIC	- 16 X	14						1			
	950035 _ 001	9	SHIP	PIN	G CAR	TON, OUTER	BOX							1			
IM P. 9	950036 001	10				TON, INNER							-	1	ļ		
M P 2	207366 _ 001	11				., BASIC Q PE DRIVE	UARTERI	ACK						0	İ		
M P 2	207350 — 100	12	MTT-	F42	0, PI	CTORIAL								0			
M P														L			
M P 2	207305 — 100		MTT-	F42	O LABE	EL INSTRUC	TIONS							0			na observe
PREPARED S	S. HENCKE	03-2	5-83											DWG RE			DATI
CHECKED L	EHISON	3-25	5-83											320	1	C 3	
DESIGN ENGINEER	Voletter	3-30	-53		2784	1 / 5		\vdash			AMERICA			NEXT AS		m M	100
C	/ .				2760 PROD.	A / 3 5		-	+					MODELN		420-	

eiph	er.				AC	SEMBLY	DADI	r c 1	TOL							
Eerdon Grove E	livision				MJ	SEMIDE	FAR	9 1	LIJ I		1 5	52				61
SSEMBLY T	MTT-F420.	30 IF	PS . 4	TI	ζ	DSC:		00 COE			S 7 0 1 1	20	7350		012	A
											L		ABLY PA			
19	PART NUMBER	ITEM NO.			E	DESCRIPTION					REMARKS	WHOLE 12	DECH	WAL 18	U.M. CODE	\perp
a P	207020 - 001	1	ASS	Υ,	CABLE							1				
M P	145026 - 304	. 2				ER HD HEX,		TED	6-32	2 X	1/4	3	<u> </u>			
W P	207341 - 008	3	NAM TAP	EPI E I	ATE, (ORIVÉ	QUARTERBAC	K					1				\perp
ИР	207005 - 001	4	ASS	Υ,	PWB -	CONTROLLE	R					1	<u> </u>			
M.P	_	5														
u P	207359 _ 005	6	ASS 042	γ,	CARTR 30 IPS	IDGE TAPE I S	DRIVE					1				
M P		7														
M P	100472 _ 001	8	SHI	PP]	NG BA	G, PLASTIC	- 16	X 14				1				
M P	950035 _ 001	9	SHI	PPI	NG CA	RTON, OUTE	R BOX					1				
M P.	950036 _ 001	10				RTON, INNE						1				
M P	207366 _ 001	11	PRO CAR	DU (T SPE	C., BASIC (APÈ DRIVE	QUARTE	RBAC	K			0				
W P	207350 _ 100	12	MTT	- F 4	120, P	ICTORIAL						0				
M P	_															. L
M P	207305 _ 100	15	LAB	EL	INSTRU	JCTIONS						0				
PREPARED	S. HENCKE	08-23	-83	Γ						T		DWG RE	L NO.		DATE	
CHECKED	Ken Nakhari	8/23/	83	Г								82052		08	2 3	8.3
DESIGN ENGINEER	Pin	2/20	ين يَ								***	NEXT AS			D D	YY
				_		- Karr		\perp		-		MODELN	o.			
						L 9/7/83		\perp		₩		- F4	20-3	0		
				REV	ECO	DATE / SIGN	ATURE	REV	ECO	_	DATE / SIGNATURE			nomerous co		
DRM 795 (R	03/82)													F	PAGE 1	or <u>1</u>

42b.





- 002 - 001 - 308 - 019 - 001 - 001 - 001 - 001	ITEM NO.	DESCRIPTION ASSY, PWB - MAIN ASSY, PWB - MOTOR DRIVER SCREW, THREAD CUTTING INDENTED HEX WASHER HEAD CLAMP, CABLE STRAP-CABLE, SELF-LOCKI ASSY, MAIN FRAME PROCEDURE, TRACK AND AZIMUTH ALIGNMENT	SC:R (2006:	S 7 0 1 1	201	TITY	003 MBER U.M. CODE	
- 002 - 001 - 308 - 019 - 001 - 001 - 001 - 001	NO. 1 2 3 4 5 6	ASSY, PWB - MAIN ASSY, PWB - MOTOR DRIVER SCREW, THREAD CUTTING INDENTED HEX WASHER HEAD CLAMP, CABLE STRAP-CABLE, SELF-LOCKI ASSY, MAIN FRAME PROCEDURE, TRACK AND			REMARKS	0UAN WHOLE 12 1 1 6 6	TITY	U.M.	
- 001 - 308 - 019 - 001 - 001 - 001 - 001	3 4 5 6 7	ASSY, PWB - MOTOR DRIVER SCREW, THREAD CUTTING INDENTED HEX WASHER HEAD CLAMP, CABLE STRAP-CABLE, SELF-LOCKI ASSY, MAIN FRAME PROCEDURE, TRACK AND)			1 6			
- 308 - 019 - 001 - 001 - 001 - 001	3 4 5 6 7	SCREW, THREAD CUTTING INDENTED HEX WASHER HEAD CLAMP, CABLE STRAP-CABLE, SELF-LOCKI ASSY, MAIN FRAME PROCEDURE, TRACK AND)			6			
- 019 - 001 - 001 - 001 - 001	4 5 6 7	INDENTED HEX WASHER HEAD CLAMP, CABLE STRAP-CABLE, SELF-LOCKI ASSY, MAIN FRAME PROCEDURE, TRACK AND				1			
- 001 - 001 - 001 - 001	5 6 7	CLAMP, CABLE STRAP-CABLE, SELF-LOCKI ASSY, MAIN FRAME PROCEDURE, TRACK AND				1			_
- 001 - 001 - 001	6	ASSY, MAIN FRAME PROCEDURE, TRACK AND	NG						
- 001 - 001	7	PROCEDURE, TRACK AND				. 1			_
- 001	-	PROCEDURE, TRACK AND AZIMUTH ALIGNMENT							
	8					0			
		ASSY, CABLE - MOTOR DRIV	ER PWB			1			
100	11	MTT-0420, PICTORIAL				0			
- 001	14	SHIELD, MAIN BOARD				1			
	15					-20-		8-6-	
_			1						
edmond	7-8-82	B 12581 & K. Park	13/33	1		-		DATE	
Makhaii	7/9/					82039			
re	7/26/	82 PROD				NEXT ASSE	MBLY M	D D	Υ.
7		02 246Z \$ 755,Z	Me 1	12686	5 PE 5-17.8			51	
	I	LOUIS DELL KAM		12545	1 /16 2-16 P.	2	120-90		_
	- 001	001 14 001 15 001 000 000 000 000 000 000 000 000 0	- 001 14 SHIELD, MAIN BOARD - 001 14 SHIELD,	14 SHIELD, MAIN BOARD 14 SHIELD, MAIN BOARD 16 SHIELD, MAIN BOARD 17 SHIELD, MAIN BOARD 17 SHIELD, MAIN BOARD 18 SHIELD, MAIN BOARD	- 001 14 SHIELD, MAIN BOARD Idmond 7-8-82 B 12531 & Land 15/35 Waltham 7/9/8 2 A 55002/h 19682 12 7/26/8- FREL	Idmond 7-8-82 B 12581 F. Fact 15 35 Waldham 7/9/8 A 57002/A 57	- 001 14 SHIELD, MAIN BOARD 1	- 001 14 SHIELD, MAIN BOARD 1 14 SHIELD, MAIN BOARD 1 24 SHIELD, MAIN BOARD 1 24 SHIELD, MAIN BOARD 1 25 SHIELD, MAIN BOARD 1 26 SHIELD, MAIN BOARD 1	- 001 14 SHIELD, MAIN BOARD 1 1

ardsn Grov									PAF		_			1	5	52				61
SSEMBLY		, CARTRIDO	E TAPE	DRIVE C	420, 9	O IP	<u>s</u>	D	SC:R	вос с Q	101		_	S 7 0	11	ASS	207358 EMBLY	PARTN	004 UMBER	L
19	PART NU	MBER 20	ITEM NO.			DE	SCRIP	PTION					F	REMARK	S	WHOL 12	UANTI1	IMAL 15	U.M. CODE	
i.	207066	- 004	1	ASSY,	PWB - I	MAIN											1			_
	207076	- 001	2	ASSY,													1		<u> </u>	<u> </u>
L	145027	- 308	3		THREAI ED HEX											1	5		<u> </u>	L
	100000	- 019	4	CLAMP,	CABLE											<u></u>	1		_	L.
Ĭ.,	100171	- 001	5	STRAP.	.CABLE,	SEL	F-L0	CKING								<u> </u>	7		<u>L</u>	L
i P	207393	- 001	. 6	ASSY,	MAIN F	RAME											1		<u> </u>	L
A P	900900	- 001	7	PROCED	URE, TI ENT	RACK	AND	AZIM	JTH							<u>.</u>	0		L	L
ŀ	207070	- 001	8	ASSY,	CABLE -	- MO	TOR [DRIVE	₹							<u> </u>	1			L
	207358	- 100	11	MTT-04	20, PI	CTOR	IAL										0		<u> </u>	L.
i P																<u> </u>			<u></u>	L.
	207383	- 001	14	SHIELD													1		_	L.
AL.																	1			L
17																<u> </u>			<u></u>	L.
A P																	!	-l-mlm		
REPARE	Sue	Redmond	7-9-8	2		T					T						REL NO.	┼	DAT	
CHECKED		akhani	7/14/		1268			1.	350 15		\perp					8204	20	9	1	_
DESIGN ENGINEER	K. Har	Ru	11/11/	87	1265		1	146	15 3/2	193						NEXT A	SSEMBL	M A	110	21.
				В		3 me	12	1/2	1-17-8	3							207350	/2073	351	
				A	PROD	19	14/8 -			-						MODEL				
************	1			RI		_			NATURE	RE	EV	ECO		ATE / SIG	NATURE	7	F/0420	-90		

SSEMBLY 1		סע	C: R					7555						5	52				61
	ASSY, CARTI	RIDGE	TAPE	DR	IVE 04	420	, 90 IPS	DOC (ίΙο ΣΙΟ	1	S	7 0	1 '	M. I	P	2073	58 –	- 005	1
																		UMBER	
19	PART NUMBER	NO.				DES	CRIPTION				REMA	ARKS	3		WHOLE 12	DE	IMAL 18	U.M. CODE	
1	207066 - 004	1	ASS	Ι,	PWB -	MAI	I N								1	I			
	207076 - 001	. 2	ASS	Ι,	PWB -	MOT	TOR DRIVER								1				
	145027 - 308	3	SCRI	W,	THREA	AD C	CUTTING ASHER HEAD								6	1			
	100000 - 019	4	ł		CABLE										1	-			
100	100171 - 001	5	STR	\P -	CABLE,	, SE	ELF-LOCKIN	G							7	İ			•
1	207393 - 002	6	ASSY	١, ١	MAIN F	RAM	1E								1				_
7	900900 - 001	7	PROC			rrac	K AND AZII	MUTH							0		-		
P	207070 - 001	8	ASSY	' , I	CABLE	- M	OTOR DRIVE	ER							1	1			
P	207358 - 100	11	MTT-	04	20, PI	CTO	RIAL								0	İ	*		
P									-						1	1	*		-
F	207383 - 001	14	SHIE	LD											1	1	************		
P	-															-			
P																			
	_															-			•
EPARED BY	S. HENCKE	03-25	5-83	Γ		T		T	T						DWG R	EL NO.	_	DATE	
HECKED	ILAP JUNISON	2-25	-83			\top			寸						8204	177	03	30	8
ESIGN IGINEER	Whiteto	3-30	- 62												NEXT AS	SEMBL	M M	D D	Y
	C-					_									20	735)/207	7351	
				Α	PROD. REL.	2									MODEL		 0420		
				REV	ECO	1	DATE / SIGNATU	ISE B	EV	ECO	DATE	/ SIGN	IATU	RE	7	۲,	0420	1-90	

	ASSY, CARTRI	DGE TA	APE DRIVE 0420, 30 IPS	DSC:	R	Q101
		y Commercial o g				
19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	WHOLE DEC	TY CODE 18
MP	207002 - 001	. 1	ASSY, PWB - MAIN		1	
M P	207076 - 001	2	ASSY, PWB - MOTOR DRIVER		1	
M P	145027 - 308	3	SCREW, THREAD CUTTING INDENTED HEX WASHER HEAD		6	
MP	100000 - 019	4	CLAMP, CABLE		1	
M P	100171 - 001	5	STRAP-CABLE, SELF-LOCKING		1	
ИР	207304 - 001	6	ASSY, MAIN FRAME		1	
ме	900900 - 001	7	PROCEDURE, TRACK AND AZIMUTH ALIGNMENT		0	
и Р	207073 - 001	8	ASSY, CABLE - MOTOR DRIVER PWB		1	
W P	207072 - 001	9	ASSY, DIODE - MOTOR DRIVER		1	
W P	100036 - 304	10	SCREW, PAN HEAD PHIL	6-32 x 1/4	2	
W P	207358 - 100	11	MTT - 0420, PICTORIAL		0	
A P	207383 - 001	14	SHIELD, MAIN BOARD		1	
N P	-100107	- 15			-10-	-06
d E	_				1	
PREPARED	T. Scott	5-24	-82 A 820424 - huls,		DWG REL NO.	DATE
CHECKED	Hem Makehawi	5/241	82 PROD.		820368	06 04 8
DESIGN	9/2169	6/14/		2686 PEX 5 - 3	NEXT ASSEMBLY	MMDDY
			PLOTE	2545 A B 52-16 83	20 7350 MODEL NO.	/207351
			REV ECO DATE/SIGNATURE REV	ECO DATE / SIGNATURE	F/	0420-30

ASSEMBLY PARTS LIST

S 7 0 1 1 M	SEMBLY PARTS NUM	61 0 - 002 D	GIJ)	her'			ASSEMBLY PARTS L	.IST	112	61
DSC:		Q101	ASSEMBLY	ASSY,	CARTRIDGE TA	NPE DRIN	/E 0420, 30 IPS DSC:≰ Q10		m 20/333	- 003 BEV
REMARKS	QUANTITY WHOLE DECIM	U.M.	19	PART	NUMBER 26	ITEM NO.	DESCRIPTION	REMARKS	ASSEMBLY PART QUANTITY WHOLE DECIMA	U.M. CODE
	1	18	, A	207066	- 001	1	ASSY, PWB - MAIN		<u> </u>	
	1	- - - 		207076	- 001	2	ASSY, PWB - MOTOR DRIVER		1	
	6			145027	- 30 8	3	SCREW, THREAD CUTTING INDENTED HEX WASHER HEAD		6	
	1		1.	100000	- 019	4	CLAMP, CABLE		1	
	1		1.	100 171	-001	5	STRAP-CABLE, SELF-LOCKING		1	
	1	++++	11	207304	- 001	6	ASSY, MAIN FRAME		1	
-	0		11.2	900900	- 001	7	PROCEDURE, TRACK AND AZIMUTH ALIGNMENT		0	
	1		16.	207073	- 001	8	ASSY, CABLE - MOTOR DRIVER PWB		1	
	1		412	207072	- 001	9	ASSY, DIODE - MOTOR DRIVER		1	
1/4	2		MI.	100036	_ 304	10	SCREW, PAN HEAD PHIL	6-32 x 1/4	2	
	0		11:	2073 58	100	- 11	MTT-0420, PICTORIAL		0	
	1		IJ.							
	40-		.11.	207383	001	14	SHIELD, MAIN BOARD		1	
			M.P	-200-20-2				A continued of the continue of	101	86
	DWG REL NO.	DATE	PREPARE	D S.	Redmond	7-8-82	B 1254 1 / 2 12 15		DWG REL NO.	DATE
	820368	06 04 82	CHECKED		Makhani	7/9/8	A BROUZIA CANA		F1 55 4	
PB 5-13	NEXT ASSEMBLY	M D D Y Y	DESIGN	14.1	21 429	7/26/	\$2 PROD REL.		NEXT ASSEMBLY	M D D Y Y
0152-1683	20 7350/	207351		T				2686 4 /	207350/20	7351
P.B.kn	MODEL NO.						OI PIL. REL 7/2/2: 2	2540 3/10 2000	MODEL NO.	
DATE / SIGNATURE	F/04	420-30					REV ECO DATE/SIGNATURE REV	ECO DATE / SIGNATURE	F/0420-30	
		PAGE 1 OF 1	FORM 795 (R 03/82)					4	PAGE 1 OF 1

43b.

elnher" ASSEMBLY PARTS LIST ASSY, CARTRIDGE TAPE DRIVE 0420, 30 IPS DSC:R Q101 S 7 0 1 1 M.P. PART NUMBER 207066 - 003 1 ASSY, PWB - MAIN 207076 - 001 2 ASSY, PWB - MOTOR DRIVER 3 SCREW, THREAD CUTTING INDENTED HEX WASHER HEAD 145027 - 308 100000 - 019 4 CLAMP, CABLE 5 STRAP-CABLE, SELF-LOCKING 100171 - 001 207393 - 001 6 ASSY, MAIN FRAME 7 PROCEDURE, TRACK AND AZIMUTH 900900 -- 001 207073 - 001 8 ASSY, CABLE - MOTOR DRIVER PWB 207072 - 001 9 ASSY, DIODE - MOTOR DRIVER 100036 - 304 10 SCREW, PAN HEAD PHIL 207358 - 100 11 MTT-0420, PICTORIAL 207383 - 001 14 SHIELD PREPARED Sue /Redmond 7-9-82

CHECKED Kam Makhan 7/14/82 D 12686 57/7.83

DESIGN PROD 11/11/87 C 12653 3 1/124/14/81/19

BESIGN PROD 11/11/87

REL 11/11/87

BESIGN PROD 11/11/87

A PROD 11/11/87

BESIGN PROD 11/11/87

A PROD 2016/19/87 820420 9 15 82 NEXT ASSEMBLY 207350/207351 REV ECO DATE/SIGNATURE REV ECO DATE/SIGNATURE

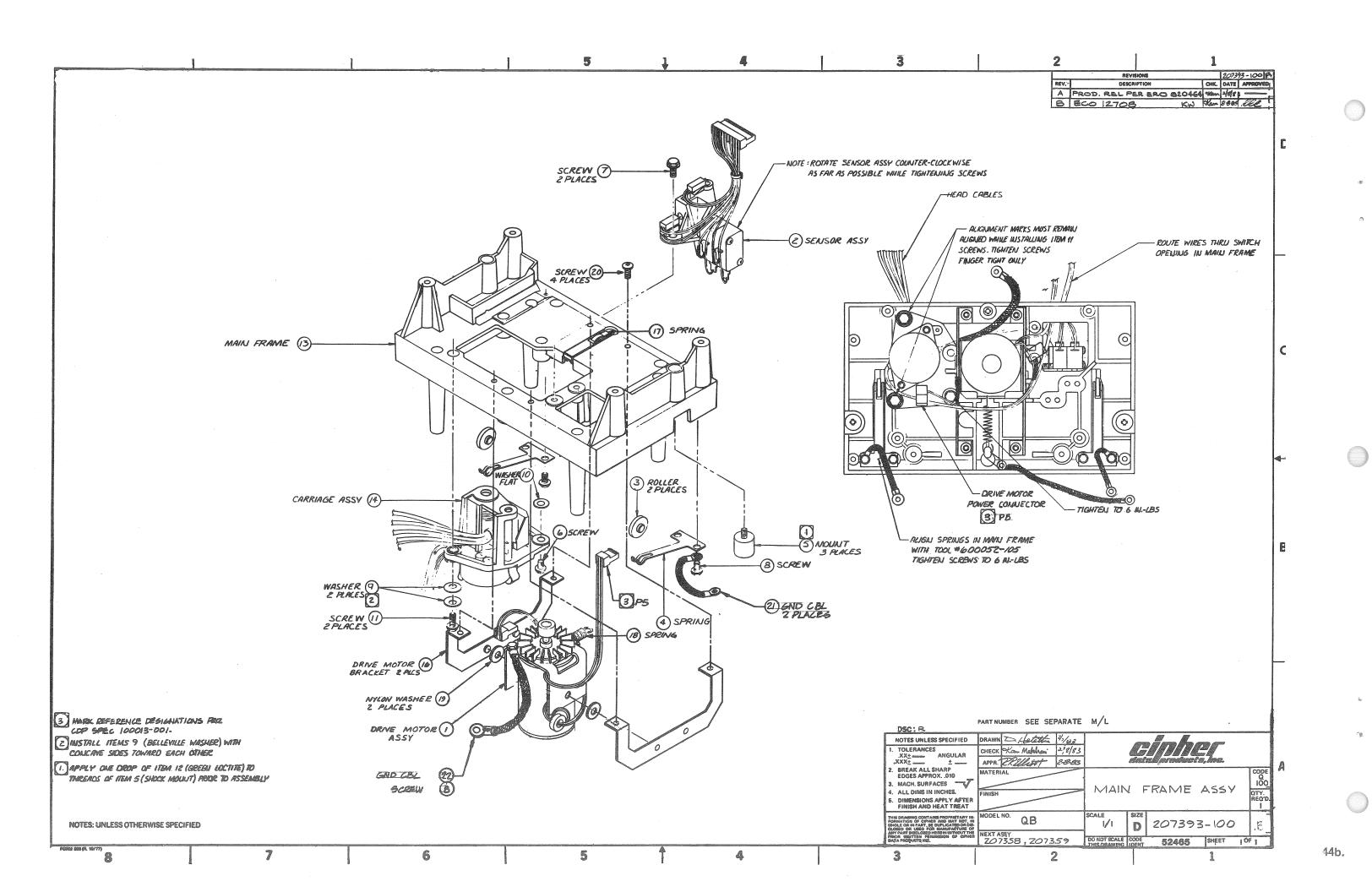
einher" DSC: R ASSEMBLY PARTS LIST S 7 0 1 1 M P 207359 — 005 A ASSY, CARTRIDGE TAPE DRIVE 0420, 30 IPS QUANTITY U.M. WHOLE DECIMAL CODE ITEM NO. REMARKS PART NUMBER 207066 - 003 1 ASSY, PWB - MAIN 207076 - 001 2 ASSY, PWB - MOTOR DRIVER 1 3 SCREW, THREAD CUTTING INDENTED HEX WASHER HEAD 145027 - 308 4 CLAMP, CABLE 1. 100000 - 019 5 STRAP-CABLE, SELF-LOCKING 1 100171 - 001 6 ASSY, MAIN FRAME 207393 _ 002 1 7 PROCEDURE, TRACK AND AZIMUTH 900900 _ 001 0 8 ASSY, CABLE - MOTOR DRIVER PWB 1 207073 - 001 207072 - 001 9 ASSY, DIODE - MOTOR DRIVER 1 100036 - 304 | 10 | SCREW, PAN HEAD PHIL 2 207358 _ 100 | 11 | MTT-0420, PICTORIAL 0 1 03-25-83 920477 0 3 3 3 3 5 3 M M D D Y Y 3-25-83 3-30-83 207350/207351 A REU. 5

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PAGE 1 OF 1 FORM 795 (R 03/82)

PAGE 1 OF ____

44.



gipher. ASSEMBLY PARTS LIST DSC: R S 7 0 1 1 M P 207393 — 001 B ASSY, MAIN FRAME DESCRIPTION PART NUMBER 207385 - 001 1 ASSY, DRIVE MOTOR 207324 - 001 2 ASSY, SENSOR 207309 - 001 3 ROLLER - DETENT (MOLDED) 2 207308 - 001 4 SPRING - DETENT 135001 — 001 5 MOUNT - SHOCK 145026 _ 306 6 SCREW - WASHER HD HEX 6-32 X 3/8 145027 - 306 7 SCREWASHER HEAD CUTTING INDENTED 145027 - 304 8 HEX WASHER HEAD 2 4 100256 - 002 9 WASHER - BELLEVILLE 163010 - 003 10 WASHER - FLAT 145026 - 308 11 SCREW - WASHER HD HEX, INDENTED 6-32 X 1/2 100465 - 003 12 ADHESIVE-ACCELERATOR A/R 207311 - 001 13 MAIN FRAME 207329 - 001 14 ASSY, CARRIAGE PREFARED S. HENCKE 10-27-82

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ASSEMBLY PARTS LIST	S 7 0 1 1 M P 207393	- 002 B
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19	PART NUMBER	ITEM NO.	DESCRIPTION	REMARKS	WHOLE 12	DECIMAL 18	U.M. CODE			
10	207393 - 100	15	ASSEMBLY DRAWING		0					
	207377 - 001	16	BRACKET, DRIVE MOTOR		2					
W P	940017 - 001	17	ASSY, CARTRIDGE SPRING- STATIC		1			_		
W P	207379 — 002	18	SPRING, CAPSTAN		1					
W P	100050 - 301	19	WASHER, FLAT NYLON	.192 ID X .50 OD .010	2					
W P	100293 _ 104	20	SCREW, BUT. HD. BLK	4-40 X 1/4	4					
M P	207394 _ 002	21	ASSY, CABLE-GROUND STRAP	2.0 IN.	2					
W P	207394 _ 003	22	ASSY, CABLE-GROUND STRAP	3.0 IN.	1					
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M P	207393- 100	15	ASSEMBLY DRAWING		0¦	\perp	
M P	207377- 001	16	BRACKET, DRIVE MOTOR		2		
M P	207376_ 001	17	SPRING, CARTRIDGE		1	1	
M P	207379 - 002	18	SPRING, CAPSTAN		1	\perp	
M P	100050 - 301	19	WASHER, FLAT NYLON	.192 ID X .50 OD .010	2		
M P	100293_ 104	20	SCREW, BUT. HD. BLK	4-40 X 1/4	4	\perp	
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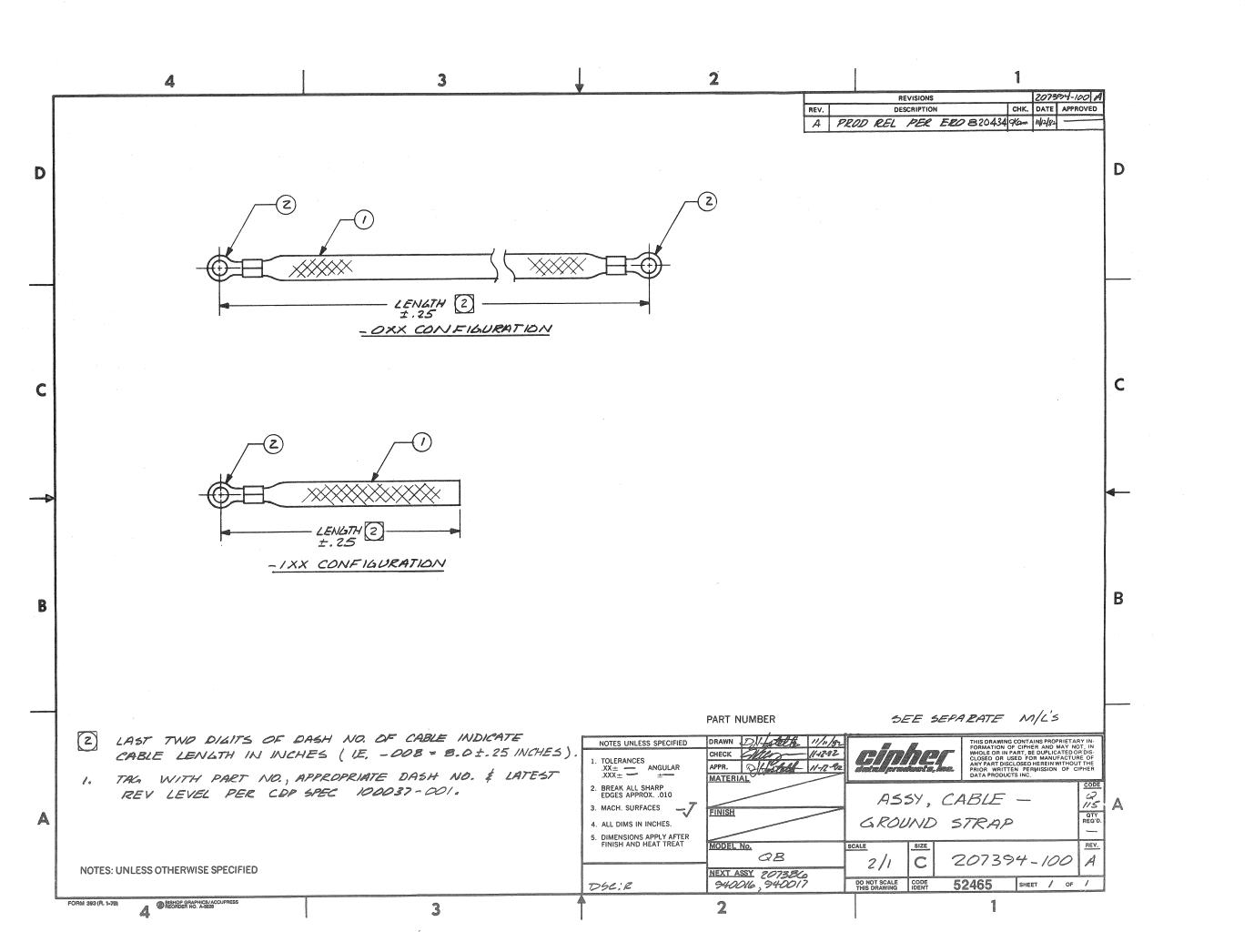
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X	940076 - 001	1	ASSY, DRIVE MOTOR		1	
į.	207324 - 001	2	ASSY, SENSOR		1	
ď.	207309 - 002	3	ROLLER - DETENT	BRASS	2	
м.	207308 - 001	4	SPRING - DETENT		2	
].	135001 - 001	5	MOUNT - SHOCK		3	
ii.	145026 - 306	6	SCREW - WASHER HD HEX 6-32 X 3/8		1	
I.	145027 - 306	7	SCREW - THREAD CUTTING INDENTED HEX WASHER HEAD		2	
ii.	145027 - 304	8	SCREW - THREAD CUTTING INDENTED HEX WASHER HEAD		5	
	100256 _ 002	9	WASHER - BELLEVILLE		4	
E	163010 _ 003	10	WASHER - FLAT		1	
	145026 _ 308	11	SCREW - WASHER HD HEX, INDENTED	6-32 X 1/2	2	
i p	100465 _ 003	12	ADHESIVE-ACCELERATOR		A/R	
i'a	207311 - 001	13	MAIN FRAME		1	
	207329 - 001	14	ASSY, CARRIAGE		1	
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ASSEMBLY PARTS LIST DSC: R Q115 ASSY, CABLE-GROUND STRAP REMARKS DESCRIPTION PART NUMBER 164004 - 004 1 WIRE, BRAID-FLAT 1/4" 2 0 2 TERMINAL, RING TONGUE-UNS #6, 14-16 AWG 950069 - 006 M P - 820477 03 3 0 8 3 M M D D Y Y
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TNUMBER						ASSEMBLY PA	RT NUMBER	
U.M. 18 CODE	PART NUMBER	ITEM NO.	DESCRIPTION		REMARKS	QUANTITY WHOLE DECM	NAL CODE	_
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SECTION 3

MASTER PARTS LIST

3.1 RECOMMENDATIONS

The recommended parts for the Cipher Quarterback Tape Drive are listed in the Master Parts List.

3.2 COMPONENT VARIANCE

For resistors, capacitors, small hardware, and other items not included in the list, equivalents in type, value, size, tolerance, and quality may be substituted.

3.3 INTEGRATED CIRCUIT

For integrated circuit where the manufacture is not specifically listed any manufacturer's device of the specific type may be used.

TABLE 3-I

MASTER PARTS LIST	
Assembly, Main PWB - 30 ips R/B 207066-003 Assembly, Main PWB - 90 lps R/B 207066-004 Assembly, Controller PWB Assembly, Controller PWB Assembly, Microcomputer Expander PWB Assembly, Motor Driver PWB R/B 207076-001 Assembly, Cable - Motor Driver PWB R/B 207073-001 Assembly, Cable Assembly, Cable Assembly, Cable Assembly, Cable Assembly, Cable Assembly, Cable Assembly, Power Cable - Controller PWB Assembly, 32 x 8 PROM (Read Decode) Assembly, 32 x 8 PROM (Write Decode) Assembly, 256 x 4 Write Sequencer Assembly, 256 x 4 Host Sequencer Assembly, 256 x 4 Read Sequencer Assembly, 512 x 4 Read Sequencer Assembly, 8 Bit Microcomputer R/B 207030-002 Assembly, 8 Bit Microcomputer - 2K x 8 EPROM Assembly, 8 Bit Microcomputer - 2K x 8 EPROM	207002-001 207002-002 207005-001 207005-002 207011-001 207017-001 207020-001 207020-002 207020-003 207020-004 207021-001 207024-001 207025-001 207026-001 207028-001 207029-001 207029-001 207030-001 207030-002 207041-001 207041-001
Assembly, Head -2 Ch. (Erase-Read-Write) Assembly, Main PWB - 30 ips R/B 207066-003	207057-001 207066-001

TABLE 3-1. (Continued)

understand (S)		
		207044 002
	Assembly, Main PWB - 90 ips R/B 207066-004	207066-002
	Assembly, Main PWB - 30 ips	207066-003
	Assembly, Main PWB - 90 ips	207066-004
	Assembly, Motor Driver PWB R/B 207076-001	207069-001
	Assembly, Cable - Motor Driver PWB R/B 207073-001	207070-001
	Assembly, Diode - Slow Speed Motor Kit, 30 ips	207072-001
	Assembly, Cable - Motor Driver PWB	207073-001
	Assembly, Motor Driver PWB	207076-001
	Quarterback Maintenance Manual	207100-001
	Quarterback Engr. Drawings	207100-002
	Quarterback Theory of Operation	207100-003
		207300-001
	Plate, Front	207301-001
	Light Pipe	207304-001
	Assembly, Main Frame	207304-002
	Assembly, Main Frame	207304-002
	Spring, Detent	
	Frame, Main	207311-001
	Frame, Main - Molded	207312-001
	Assembly, Drive Motor (Spare)	207314-001
	Frame, Drive Motor	207315-001
	Heatsink, Zener Diode	207318-001
	Capstan R/B 207389-001	207320-001
	Assembly, Head/Carriage	207322-001
	Housing, Sensor	207323-001
	Assembly, Sensor (Spare)	207324-001
	Assembly, Sensor Housing	207325-001
	Assembly, Sensor Harness	207326-001
	Assembly, Stepper Motor	207327-001
	Assembly, Stepper Motor - Terminated	207328-001
	Assembly, Carriage (Spare)	207329-001
	Assembly, Carriage and Nut	207330-001
	Assembly, Stop Ring	207332-001
	Assembly, Carriage Base	207334-001
	Assembly, Carriage Base	207335-001
	Assembly, Carriage Base - Molded	207336-001
	Shaft, Carriage Drive - ACME	207337-001
	Shield, Cable	207338-001
	Screw, Adjustment	207339-001
	Certified Tape Cartridge - 450 ft.	207340-001
	Nameplate - QB Tape Drive	207341-001
	Kit, Front Panel	207346-001
	Assembly, MTT F420 - 30 ips/4TK	207350-001
	Assembly, MTT F420 - 90 ips/4TK	207350-002
	Assembly, MTT F420 - 30 ips/4TK	207350-005
	Assembly, MTT F420 - 90 ips/4TK	207350-006
	Assembly, MTT F420 - 30 ips/4TK	207350-009
	Assembly, MTT F420 - 30 ips/4TK	207350-010
	Assembly, MTT F420 - 90 ips/4TK	207350-011
	Assembly, MTT F420 - 30 ips/4TK	207350-012
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TABLE 3-1. (Continued)

Assembly, MTT F420 - 30 ips/4TK	207351-001
Assembly, MTT F420 - 90 ips/4TK	207351-002
Assembly, MTT F420 - 30 ips/4TK	207351-005
Assembly, MTT F420 - 90 ips/4TK	207351-006
Assembly, MTT F420 - 30 ips/4TK	207351-010
Assembly, MTT F420 - 90 ips/4TK	207351-011
Assembly, Cartridge Drive 0420 – 90 ips	207358-002
Assembly, Cartridge Drive 0420 – 90 ips	207358-003
Assembly, Cartridge Drive 0420 – 90 ips	207358-004
Assembly, Cartridge Drive 0420 – 90 ips	207358-005
Assembly, Cartridge Drive 0420 – 30 ips	207359-002
Assembly, Cartridge Drive 0420 – 30 ips	207359-003
Assembly, Cartridge Drive 0420 – 30 ips	207359-004
Assembly, Cartridge Drive 0420 – 30 ips	207359-005
Motor, Stepper	207360-001
Motor, DC, Tach R/B207385-001	207362-001
Drive Nut, Carriage	207363-001
Spring, Compression - Carriage	207375-001
Bracket, Drive Motor	207377-001
Nameplate - Cipher Data Products Logo	207378-001
Cover, Sensor	207.381-001
Drive Motor, DC, Tach	207385-001
Frame, Drive Motor	207387-001
Capstan	207389-001
Assembly, Main Frame	207393-001
Assembly, Main Frame	207393-002
Assembly, Ground Strap Cable	207394-002
Assembly, Ground Strap Cable	207394-003
Assembly, Ground Strap Cable	207394-008
Assembly, Ground Strap Cable	207394-104
Assembly, Ground Strap Cable	207394-105
Tracking Tape Cartridge	940049-001
Azimuth Tape Cartridge	940050-001
Bracket, Mounting - 8" F.D.	940075-001
Tape Cartridge Certified by DE1-450 ft.	950125-001



7301 Orangewood Avenue Garden Grove, California 92641

P.O. Box 3010 Garden Grove, California 92642

Telephone: (714) 891-3711 TWX: 910-596-1870 10225 Willow Creek Road San Diego, California 92131

P.O. Box 85170 San Diego, California 92138

Telephone: (714) 578-9100 TWX: 910-335-1251